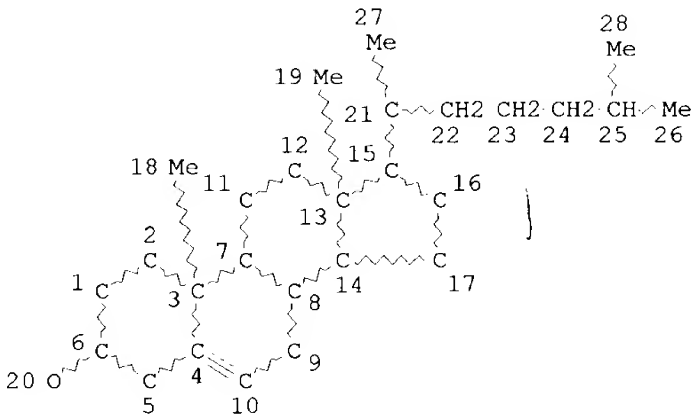
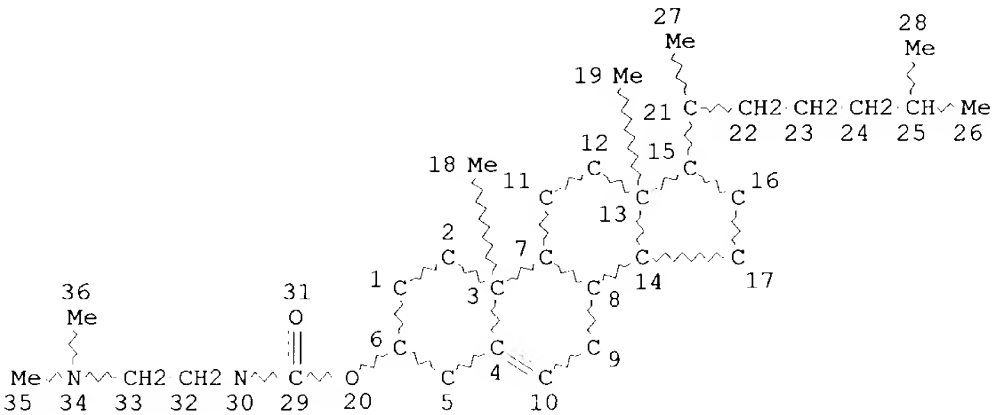
=> d que
L3 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE
L5 8810 SEA FILE=REGISTRY SSS FUL L3
L8 STR



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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 36

STEREO ATTRIBUTES: NONE

L9 12 SEA FILE=REGISTRY SUB=L5 SSS FUL L8
L10 746 SEA FILE=REGISTRY ABB=ON PLU=ON L5 AND PMS/CI
L11 STR

CH2 CH2 N
1 2 3

NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 3

STEREO ATTRIBUTES: NONE
L12 121 SEA FILE=REGISTRY SUB=L10 SSS FUL L11
L13 8 SEA FILE=REGISTRY ABB=ON PLU=ON L12 AND PM/PCT
L14 225 SEA FILE=HCAPLUS ABB=ON PLU=ON L9
L15 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L13
L16 2139 SEA FILE=HCAPLUS ABB=ON PLU=ON "IMMUNIZATION (L) VACCINATION" +OLD/CT
L17 31952 SEA FILE=HCAPLUS ABB=ON PLU=ON VACCINES+NT/CT
L20 28 SEA FILE=HCAPLUS ABB=ON PLU=ON (L14 OR L15) AND (L16 OR L17 OR VACCIN?)
L25 21 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 AND (ADJUVANT OR MAMMAL? OR HUMOR? OR CYTOTOXIX T OR TH1? OR INFLUENZA OR FLU OR HAEMAGGLUTIN? OR HEMAGGLUT? OR HEMAGLUT? OR SUBCUT? OR MUCOS? OR INTRANAS?)
L27 28 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 OR L25

=> d ibib abs hitind hitstr l27 1-28

L27 ANSWER 1 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:736708 HCAPLUS
DOCUMENT NUMBER: 137:246541
TITLE: Subunit respiratory syncytial virus preparation
INVENTOR(S): Cates, George A.; Sanhueza, Sonia E.; Oomen, Raymond P.; Klein, Michel H.
PATENT ASSIGNEE(S): Can.
SOURCE: U.S. Pat. Appl. Publ., 23 pp., Cont.-in-part of U.S. 6,309,649.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002136739	A1	20020926	US 2001-950655	20010913
US 6020182	A	20000201	US 1996-679060	19960712
WO 9802457	A1	19980122	WO 1997-CA497	19970711

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,

PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

US 6309649 B1 20011030 US 1999-214605 19990503
PRIORITY APPLN. INFO.: US 1996-679060 A2 19960712
WO 1997-CA497 A2 19970711
US 1999-214605 A2 19990503

AB The fusion (F) protein, attachment (G) protein, and matrix (M) protein of respiratory syncytial virus (RSV) are isolated and purified from respiratory syncytial virus by mild detergent extn. of the proteins from concd. virus, loading the protein onto a hydroxyapatite or other ion-exchange matrix column, and eluting the protein using mild salt treatment. The F, G, and M proteins, formulated as immunogenic compns., are safe and highly immunogenic and protect relevant animal models against desease caused by respiratory syncytial virus infection. An example is provided illustrating the immunogenicity of the RSV subunit prepn. in cotton rats. Cotton rats were immunized with the RSV subunit prepns. formulated either with Alum or ISCOM (Iscomatrix). Blood samples were obtained and analyzed for anti-fusion and neutralizing antibodies after the appropriate procedures. In addn. to strong anti-fusion and neutralizing antibodies induction, complete protection against the RSV infection was obtained (except in 1 rat), in both the upper and lower respiratory tracts.

IC ICM A61K039-12
ICS A61K039-155; C12N007-00; C12N007-01; C12P021-08; C07K001-00; G01N033-561; C07K016-00; C12Q001-70

NCL 424211100

CC 15-2 (Immunochemistry)
Section cross-reference(s): 16, 63

ST subunit **vaccine** respiratory syncytial virus

IT Immunostimulants
(**adjuvants**, ISCOMs; subunit respiratory syncytial virus prepn.)

IT Immunostimulants
(**adjuvants**; subunit respiratory syncytial virus prepn.)

IT Anion exchange chromatography
B cell (lymphocyte)
Detergents
Disease models
Human
Human parainfluenza virus
Human parainfluenza virus 1
Human parainfluenza virus 2
Human parainfluenza virus 3
Hybridoma
Immunomodulators
Ion exchange chromatography
Ion exchange chromatography
Mouse
Primates
Respiratory syncytial virus
Sigmodon hispidus hispidus
Test kits
Vaccines
(subunit respiratory syncytial virus prepn.)

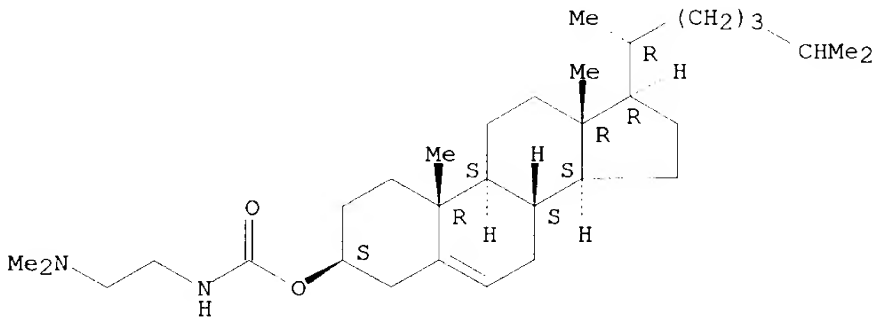
IT 1305-62-0, Calcium hydroxide, biological studies 3700-67-2 7784-30-7, Aluminum phosphate 10103-46-5, Calcium phosphate 20427-58-1, Zinc hydroxide 21645-51-2, Aluminum hydroxide, biological studies 53678-77-6, Muramyl dipeptide 66594-14-7, Quil A **137056-72-5**, DC-chol 141256-04-4, QS21
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(subunit respiratory syncytial virus prepn.)

IT **137056-72-5**, DC-chol
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(subunit respiratory syncytial virus prepn.)

RN 137056-72-5 HCAPLUS

CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L27 ANSWER 2 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:594655 HCAPLUS
DOCUMENT NUMBER: 137:159311
TITLE: Polymer combinations that result in stabilized aerosols for gene delivery to the lungs
INVENTOR(S): Zou, Yiyu; Perez-Soler, Roman
PATENT ASSIGNEE(S): Board of Regents, The University of Texas System, USA
SOURCE: PCT Int. Appl., 136 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002060412	A2	20020808	WO 2002-US2909	20020201

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,

BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
US 2002187105 A1 20021212 US 2002-61444 20020201
PRIORITY APPLN. INFO.: US 2001-266174P P 20010201

AB The use of non-viral delivery of therapeutically effective compns. through aerosols for therapy or research purpose has been limited by low efficiency mainly caused by an inefficient delivery system and destruction of formulation (gene and/or delivery system) by aerosol shearing power. This invention develops formulations that are established polymer combination formulations. The formulations are highly efficient in delivering genes in vivo through aerosols and are able to protect the delivered gene from the destruction by aerosol shearing power.

IC ICM A61K009-12

CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 15

IT Antiasthmatics
Antibiotics
Antitumor agents
Asthma
Chemotherapy
Cystic fibrosis
Emphysema
Gene therapy
Genetic vectors
Lung
Lung, neoplasm
Particle size distribution
Pneumonia
Stabilizing agents
Trachea (anatomical)
Transformation, genetic
Tuberculosis
Tuberculostatics
Vaccines
(polymer combinations that result in stabilized aerosols for gene delivery to the lungs)

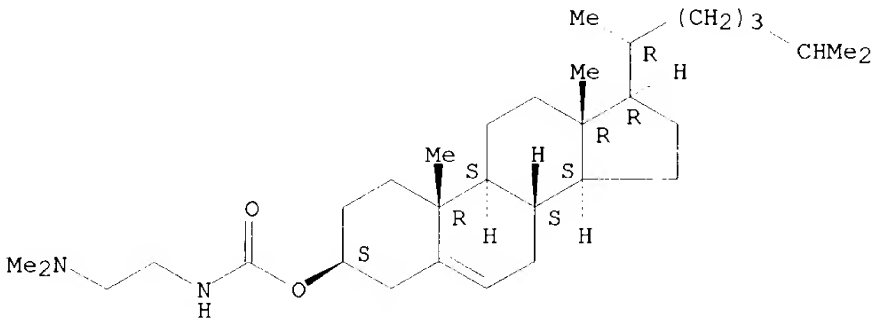
IT 25104-18-1, Polylysine 38000-06-5, Polylysine 104162-48-3, Dotma **137056-72-5**, Dc-chol 153312-64-2, Dmrie 153985-22-9, DORIE 165673-46-1 173738-32-4 216165-62-7 282533-23-7, DOSPA
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(polymer combinations that result in stabilized aerosols for gene delivery to the lungs)

IT **137056-72-5**, Dc-chol
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(polymer combinations that result in stabilized aerosols for gene delivery to the lungs)

RN 137056-72-5 HCAPLUS

CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L27 ANSWER 3 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:350501 HCAPLUS
DOCUMENT NUMBER: 138:126870
TITLE: In vivo immune responses induced by CpG oligonucleotides encapsulated in sterically stabilized cationic liposomes
AUTHOR(S): Gursel, I.; Gursel, M.; Klinman, D. M.
CORPORATE SOURCE: Division of Viral Products, Center for Biologics and Evaluation Research, Food and Drug Administration, Bethesda, MD, 20892, USA
SOURCE: Proceedings - 28th International Symposium on Controlled Release of Bioactive Materials and 4th Consumer & Diversified Products Conference, San Diego, CA, United States, June 23-27, 2001 (2001), Volume 2, 1057-1058. Controlled Release Society: Minneapolis, Minn.
CODEN: 69CNY8
DOCUMENT TYPE: Conference
LANGUAGE: English

AB CpG oligonucleotides encapsulated in stabilized cationic liposomes were produced. When administered in vivo, these agents induced a strong Th-1 biased immune response against a co-administered protein antigen. In the absence of antigen, these agents induced a strong innate immune response that protected the host from lethal pathogen challenge.

CC 63-6 (Pharmaceuticals)

IT Immunostimulants
(**adjuvants**; in vivo immune responses induced by CpG oligonucleotides encapsulated in sterically stabilized cationic liposomes)

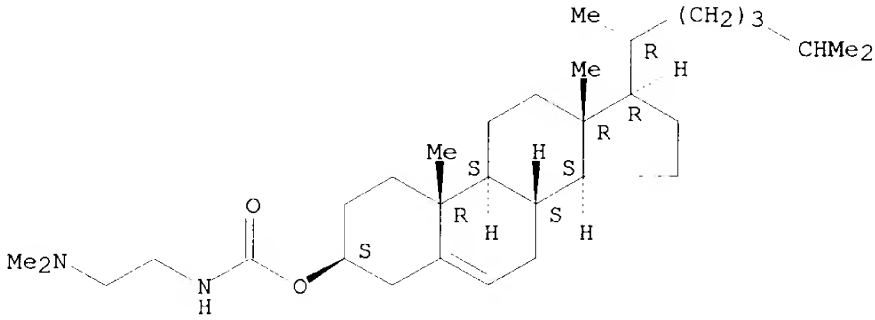
IT Immunity
Vaccines
(in vivo immune responses induced by CpG oligonucleotides encapsulated in sterically stabilized cationic liposomes)

IT 57-88-5, Cholesterol, biological studies 2462-63-7, Dope
137056-72-5 182280-69-9, PEG-PE
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(in vivo immune responses induced by CpG oligonucleotides encapsulated in sterically stabilized cationic liposomes)

IT **137056-72-5**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(in vivo immune responses induced by CpG oligonucleotides encapsulated in sterically stabilized cationic liposomes)

RN 137056-72-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 4 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:275825 HCAPLUS
DOCUMENT NUMBER: 136:299680
TITLE: **Vaccine** composition comprising an antigen, a cationic lipid and an immunostimulatory oligonucleotide
INVENTOR(S): Haensler, Jean; Hurpin, Christian Marcel
PATENT ASSIGNEE(S): Aventis Pasteur, Fr.
SOURCE: PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002028428	A2	20020411	WO 2001-FR3098	20011008
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
FR 2814958	A1	20020412	FR 2000-12808	20001006
AU 2001095673	A5	20020415	AU 2001-95673	20011008

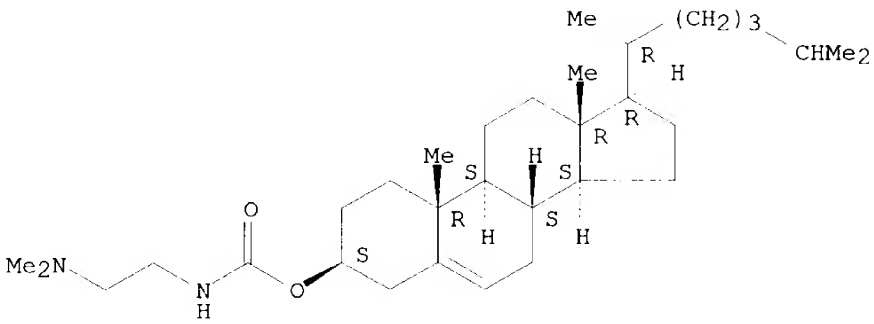
PRIORITY APPLN. INFO.: FR 2000-12808 A 20001006
WO 2001-FR3098 W 20011008

AB The invention concerns a **vaccine** compn. comprising at least an antigen, a cationic lipid and an immunostimulatory oligonucleotide. Said **vaccine** compn. is particularly designed to induce an immune

response of the **Th1** type and a cytotoxic T response when administered by parenteral delivery, and to induce a Th2 type immune response when delivered through the mucous system. Said compn. is of particular interest when the cationic lipid is DC chol. A 0.2 mL **vaccine** contained monovalent **influenza** virus corresponding to 5 .mu.g of HA, 200 .mu.g, D Chol suspension (prepn. given) 200.mu.g, and oligonucleotide 3Db(S) 50 .mu.g. The amt. of IgG2a antibody produced after injection of **vaccines** to guinea pigs was higher that the amt. after injection of the **vaccines** contg. either **adjuvant**.

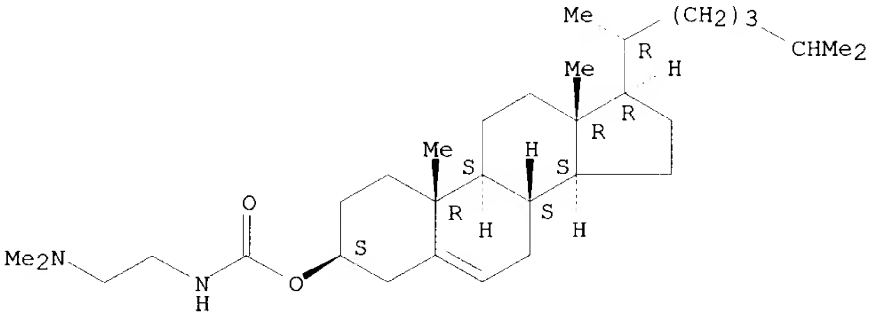
IC ICM A61K039-21
CC 63-3 (Pharmaceuticals)
ST **vaccine** antigen cationic lipid immunostimulant oligonucleotide
IT Immunoglobulins
RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)
(A; **vaccine** compn. comprising antigen, cationic lipid and immunostimulatory oligonucleotide)
IT Immunoglobulins
RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)
(G1; **vaccine** compn. comprising antigen, cationic lipid and immunostimulatory oligonucleotide)
IT Immunoglobulins
RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)
(G2a; **vaccine** compn. comprising antigen, cationic lipid and immunostimulatory oligonucleotide)
IT **Vaccines**
(**influenza**; **vaccine** compn. comprising antigen, cationic lipid and immunostimulatory oligonucleotide)
IT **Vaccines**
(parenteral; **vaccine** compn. comprising antigen, cationic lipid and immunostimulatory oligonucleotide)
IT Immunostimulants
Influenza virus
Mucous membrane
(**vaccine** compn. comprising antigen, cationic lipid and immunostimulatory oligonucleotide)
IT Antigens
Lipids, biological studies
Oligonucleotides
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**vaccine** compn. comprising antigen, cationic lipid and immunostimulatory oligonucleotide)
IT **137056-72-5**, DC chol. **166023-21-8** 408375-63-3
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**vaccine** compn. comprising antigen, cationic lipid and immunostimulatory oligonucleotide)
IT **137056-72-5**, DC chol. **166023-21-8**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**vaccine** compn. comprising antigen, cationic lipid and immunostimulatory oligonucleotide)
RN 137056-72-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 166023-21-8 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

L27 ANSWER 5 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:275824 HCAPLUS
DOCUMENT NUMBER: 136:299679
TITLE: Pharmaceutical composition for immunization against AIDS
INVENTOR(S): Haensler, Jean; Dalencon, Francois
PATENT ASSIGNEE(S): Aventis Pasteur, Fr.
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002028427	A2	20020411	WO 2001-FR3096	20011008

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

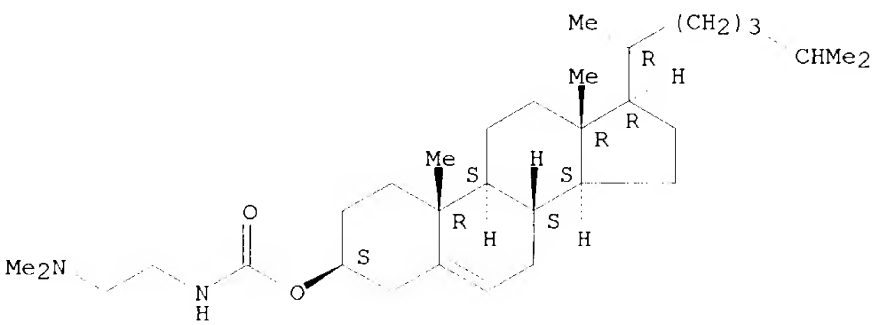
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

FR 2814958 A1 20020412 FR 2000-12808 20001006
AU 2001095671 A5 20020415 AU 2001-95671 20011008
PRIORITY APPLN. INFO.: FR 2000-12808 A 20001006
WO 2001-FR3096 W 20011008

AB The invention relates to the field of pharmaceutical compns. for use in immunization against HIV-related infections, and concerns a pharmaceutical compn. comprising at least a HIV antigen and DCchol. Such a compn. has proved to be particularly interesting for inducing through the mucous system IgG and IgA specific to the administered antigen. The inventive pharmaceutical compn., in a particular advantageous manner, can be in the form of liposome suspension, or emulsion. A pharmaceutical compn. for use against HIV-1 contained glycoprotein gp 160env 25, oligonucleotide 3DB(S) 50, and DCchol hydrochloride emulsion (prepn. given) 200 .mu.g. The compn. was administered rectally to guinea pigs and anti-gp 160env IgG was detd. There was a synergism between the oligonucleotide and DCchol as compared with the controls.

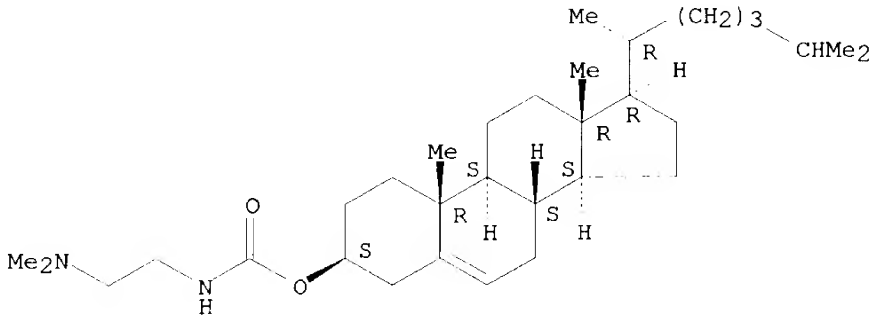
IC ICM A61K039-21
CC 63-3 (Pharmaceuticals)
ST pharmaceutical **vaccine** immunization AIDS DCchol glycoprotein
IT **Vaccines**
(rectal; pharmaceutical compn. for immunization against AIDS)
IT **137056-72-5**, DCchol. **166023-21-8**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compn. for immunization against AIDS)
IT **137056-72-5**, DCchol. **166023-21-8**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical compn. for immunization against AIDS)
RN 137056-72-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 166023-21-8 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

L27 ANSWER 6 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:71901 HCAPLUS
DOCUMENT NUMBER: 136:133603
TITLE: Immunological combinations for prophylaxis and therapy of Helicobacter pylori infection
INVENTOR(S): Guy, Bruno; Haensler, Jean
PATENT ASSIGNEE(S): Merieux Oravax, Fr.
SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002005845	A1	20020124	WO 2001-EP9031	20010704

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: EP 2000-420148 A 20000705

AB The invention relates to multivalent compns. for preventing or treating Helicobacter infections. Multivalent Helicobacter component compns. useful in prophylaxis comprises at least two, preferably three components, that are selected from AlpA, catalase, urease, 525 protease and 76K proteins. Multivalent compns. useful in therapy include in particular 76K

+ catalase + 525 protease, urease + 76K + catalase + 525 protease, AlpA + 76K + catalase + 525 protease, AlpA + 76K and AlpA + catalase.

IC ICM A61K039-106
ICS A61P031-04

CC 15-2 (Immunochemistry)
Section cross-reference(s): 3, 63

ST Helicobacter pylori multiple antigen **vaccine**; AlpA catalase urease 525 protease 76K protein

IT Immunostimulants
(**adjuvants**; formulations contg. multiple antigenic components for prophylaxis and therapy of Helicobacter pylori infection)

IT Animal
Helicobacter
Helicobacter pylori
Human
Mammalia
Vaccines
(formulations contg. multiple antigenic components for prophylaxis and therapy of Helicobacter pylori infection)

IT T cell (lymphocyte)
(helper cell/inducer, **TH1**, immune response; formulations contg. multiple antigenic components for prophylaxis and therapy of Helicobacter pylori infection)

IT DNA
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**vaccine**; formulations contg. multiple antigenic components for prophylaxis and therapy of Helicobacter pylori infection)

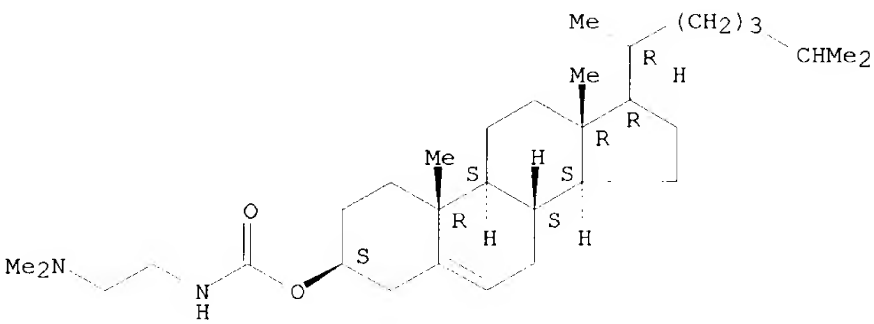
IT 9001-05-2, Catalase 9002-13-5, Urease **137056-72-5**, DC-Chol
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(formulations contg. multiple antigenic components for prophylaxis and therapy of Helicobacter pylori infection)

IT **137056-72-5**, DC-Chol
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(formulations contg. multiple antigenic components for prophylaxis and therapy of Helicobacter pylori infection)

RN 137056-72-5 HCAPLUS

CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 7 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:816486 HCAPLUS
DOCUMENT NUMBER: 135:356751
TITLE: Immunizing against HIV infection
INVENTOR(S): Rovinski, Benjamin; Tartaglia, James; Cao, Shi-Xian; Persson, Roy; Klein, Michel H.
PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001082962	A2	20011108	WO 2001-CA577	20010425
WO 2001082962	A3	20020321		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1280551	A2	20030205	EP 2001-927532	20010425
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2002051770	A1	20020502	US 2001-842883	20010427

PRIORITY APPLN. INFO.: US 2000-200011P P 20000427
WO 2001-CA577 W 20010425

AB A virus neutralizing level of antibodies to a primary HIV isolate is generated in a host by a prime-boost administration of antigents. The primary antigen is a DNA mol. encoding an envelop glycoprotein of a primary isolate of HIV-1 while the boosting antigen is either a non-infectious, non-replicating HIV-like particle having the envelope glycoprotein of a primary isolate of HIV-1 or an attenuated viral vector expressing an envelope glycoprotein of a primary isolate of HIV-1.

IC ICM A61K039-12
CC 15-2 (Immunochemistry)
Section cross-reference(s): 3
ST HIV1 envelope glycoprotein viral vector **vaccine**
IT Immunostimulants
(**adjuvants**; viral vector encoding HIV-1 envelope glycoproteins for immunizing against HIV infection)
IT Animal cell
(**mammalian**; viral vector encoding HIV-1 envelope glycoproteins for immunizing against HIV infection)
IT AIDS (disease)
DNA sequences
Human immunodeficiency virus
Human immunodeficiency virus 1
Molecular cloning

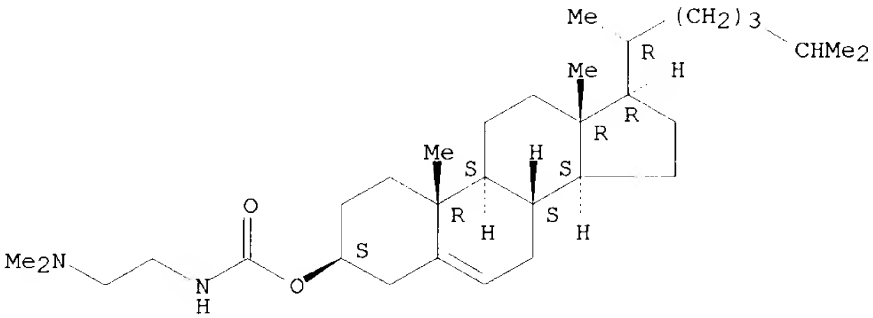
Plasmids
Protein sequences
Vaccines
(viral vector encoding HIV-1 envelope glycoproteins for immunizing against HIV infection)

IT **137056-72-5**, DC-chol 307555-09-5, RIBI
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(genetic promoter; viral vector encoding HIV-1 envelope glycoproteins for immunizing against HIV infection)

IT **137056-72-5**, DC-chol
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(genetic promoter; viral vector encoding HIV-1 envelope glycoproteins for immunizing against HIV infection)

RN 137056-72-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L27 ANSWER 8 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:792220 HCAPLUS
DOCUMENT NUMBER: 135:330483
TITLE: Subunit respiratory syncytial virus **vaccine** preparation
INVENTOR(S): Cates, George A.; Sanhueza, Sonia E.; Oomen, Raymond P.; Klein, Michel H.
PATENT ASSIGNEE(S): Aventis Pasteur Ltd., Can.
SOURCE: U.S., 16 pp., Cont.-in-part of U.S. 6,020,182.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6309649	B1	20011030	US 1999-214605	19990503
US 6020182	A	20000201	US 1996-679060	19960712
WO 9802457	A1	19980122	WO 1997-CA497	19970711

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,

DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

US 2002136739 A1 20020926 US 2001-950655 20010913
PRIORITY APPLN. INFO.: US 1996-679060 A2 19960712
WO 1997-CA497 W 19970711
US 1999-214605 A2 19990503

AB The fusion (F) protein, attachment (G) protein and matrix (M) protein of respiratory syncytial virus (RSV) are isolated and purified from respiratory syncytial virus by mild detergent extn. of the proteins from concd. virus, loading the protein onto a hydroxyapatite or other ion-exchange matrix column and eluting the protein using mild salt treatment. The F, G and M proteins, formulated as immunogenic compns., are safe and highly immunogenic and protect relevant animal models against decreased caused by respiratory syncytial virus infection.

IC ICM A61K039-155
ICS C12N007-02; C12N007-04; A23J001-00

NCL 424211100

CC 15-2 (Immunochemistry)

ST **vaccine** respiratory syncytial virus fusion matrix attachment protein

IT Proteins, specific or class
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(F; subunit respiratory syncytial virus **vaccine** prepn. comprising fusion (F), attachment (G), and matrix (M) proteins)

IT Proteins, specific or class
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(M (matrix); subunit respiratory syncytial virus **vaccine** prepn. comprising fusion (F), attachment (G), and matrix (M) proteins)

IT Immunostimulants
(**adjuvants**, ISCOMs; as **adjuvant** in respiratory syncytial virus **vaccine** prepn.)

IT Immunostimulants
(**adjuvants**; subunit respiratory syncytial virus **vaccine** prepn. comprising fusion (F), attachment (G), and matrix (M) proteins)

IT Human parainfluenza virus 1
Human parainfluenza virus 2
Human parainfluenza virus 3
(as addnl. immunogen in respiratory syncytial virus **vaccine** prepn.)

IT Glycolipids
Lipoproteins
Polyphosphazenes
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as **adjuvant** in respiratory syncytial virus **vaccine** prepn.)

IT Proteins, specific or class
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(attachment; subunit respiratory syncytial virus **vaccine** prepn. comprising fusion (F), attachment (G), and matrix (M) proteins)

IT Toxins
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bacterial; as **adjuvant** in respiratory syncytial virus **vaccine** prepn.)

IT Antibodies
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(neutralizing; subunit respiratory syncytial virus **vaccine** prepn. comprising fusion (F), attachment (G), and matrix (M) proteins)

IT Amino acids, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(octadecyl esters; as **adjuvant** in respiratory syncytial virus **vaccine** prepn.)

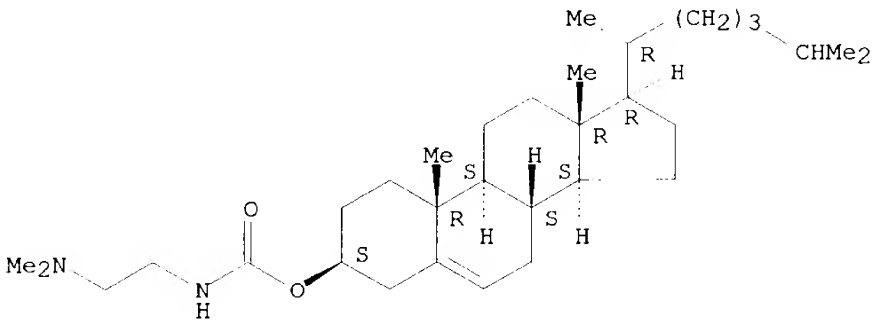
IT Respiratory syncytial virus
Vaccines
(subunit respiratory syncytial virus **vaccine** prepn. comprising fusion (F), attachment (G), and matrix (M) proteins)

IT 3700-67-2, Dimethyldioctadecylammonium bromide 7784-30-7, Aluminum phosphate 10103-46-5, Calcium phosphate 20427-58-1, Zinc hydroxide 21645-51-2, Aluminum hydroxide, biological studies 53678-77-6, Muramyl dipeptide 66594-14-7, Quil A **137056-72-5**, DC-Chol 141256-04-4, QS 21
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as **adjuvant** in respiratory syncytial virus **vaccine** prepn.)

IT **137056-72-5**, DC-Chol
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as **adjuvant** in respiratory syncytial virus **vaccine** prepn.)

RN 137056-72-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 69 THERE ARE 69 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 9 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:791879 HCAPLUS
DOCUMENT NUMBER: 135:335117
TITLE: Immunological **adjuvants** containing **Hemagglutinating** virus-containing charged liposomes, and manufacture thereof
INVENTOR(S): Honda, Kazuo; Kaneda, Yasushi; Shiozaki, Koichi
PATENT ASSIGNEE(S): Chemo-Sero-Therapeutic Research Institute, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001302541	A2	20011031	JP 2000-128670	20000428

PRIORITY APPLN. INFO.: JP 2000-128670 20000428

AB The invention relates to an immunol. **adjuvant** having immunostimulating effect for low-immunogenic peptide, wherein the **adjuvant** is a charged liposome consisting of a Sendai virus (**Hemagglutinating** virus of Japan, HVJ virus) or its envelop glycoprotein, and a lipid component. A HIV-V3 peptide-contg. anionic liposome was prepd. from dimethylaminoethane carbamyl cholesterol, phosphatidylethanolamine, egg yolk phosphatidylcholine, cholesterol, inactivated HVJ virus, and HIV-V3 peptide, and its booster effect was examd. in guinea pigs primarily immunized with HIV-HBc (hepatitis B virus core antigen).

IC ICM A61K039-39
ICS A61K009-127; A61K038-00; A61K039-00; A61K039-21; C07K014-115

CC 63-3 (Pharmaceuticals)
Section cross-reference(s): 15

ST **Hemagglutinating** virus charged liposome **vaccine adjuvant**; HIV V3 peptide Sendai virus liposome **vaccine adjuvant**

IT **Vaccines**
(AIDS; charged liposomes contg. **Hemagglutinating** virus and lipids and antigens as immunol. **adjuvants**)

IT Envelope proteins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(E glycoprotein; charged liposomes contg. **Hemagglutinating** virus envelope proteins and lipids as immunol. **adjuvants**)

IT Proteins, specific or class
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(F; charged liposomes contg. **Hemagglutinating** virus envelope proteins and lipids as immunol. **adjuvants**)

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(HIV-V3 peptides; charged liposomes contg. **Hemagglutinating** virus and lipids and antigens as immunol. **adjuvants**)

IT Glycoproteins, specific or class
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(HN (**hemagglutinin**-neuraminidase); charged liposomes contg. **Hemagglutinating** virus envelope proteins and lipids as immunol. **adjuvants**)

IT Human immunodeficiency virus 1
(V3 peptide; charged liposomes contg. **Hemagglutinating** virus and lipids and antigens as immunol. **adjuvants**)

IT Immunostimulants
(**adjuvants**; charged liposomes contg. **Hemagglutinating** virus and lipids as immunol. **adjuvants**)

IT Epitopes
Vaccines
(charged liposomes contg. **Hemagglutinating** virus and lipids and antigens as immunol. **adjuvants**)

IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(charged liposomes contg. **Hemagglutinating** virus and lipids and antigens as immunol. **adjuvants**)

IT Sendai virus
(charged liposomes contg. **Hemagglutinating** virus and lipids as immunol. **adjuvants**)

IT Lipids, biological studies
Phosphatidylcholines, biological studies
Phosphatidylethanolamines, biological studies
Phosphatidylserines
Sphingomyelins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(charged liposomes contg. **Hemagglutinating** virus and lipids as immunol. **adjuvants**)

IT Drug delivery systems
(liposomes; charged liposomes contg. **Hemagglutinating** virus and lipids as immunol. **adjuvants**)

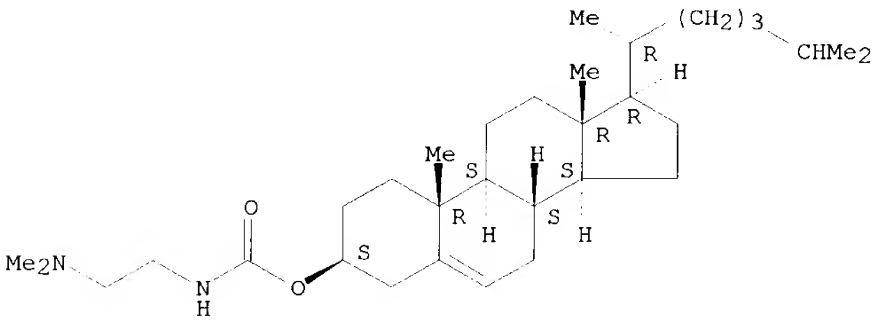
IT Anti-AIDS agents
(**vaccines**; charged liposomes contg. **Hemagglutinating** virus and lipids and antigens as immunol. **adjuvants**)

IT 57-88-5, Cholesterol, biological studies 104162-48-3, N-[1-(2,3-Dioleyloxy) propyl]-N,N,N-trimethylammonium chloride 131897-06-8, N-(.alpha.-Trimethylammonioacetyl)-didodecyl-D-glutamate chloride **137056-72-5** 182919-20-6
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(charged liposomes contg. **Hemagglutinating** virus and lipids as immunol. **adjuvants**)

IT **137056-72-5**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(charged liposomes contg. **Hemagglutinating** virus and lipids as immunol. **adjuvants**)
RN 137056-72-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L27 ANSWER 10 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:214941 HCAPLUS
DOCUMENT NUMBER: 134:256860
TITLE: Genetic liposomal **vaccines** containing oligosaccharides on the surface
INVENTOR(S): Mizuochi, Tsugio; Kojima, Naoya; Yasuda, Atsushi
PATENT ASSIGNEE(S): Tokai University, Japan; Nippon Zeon Co., Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

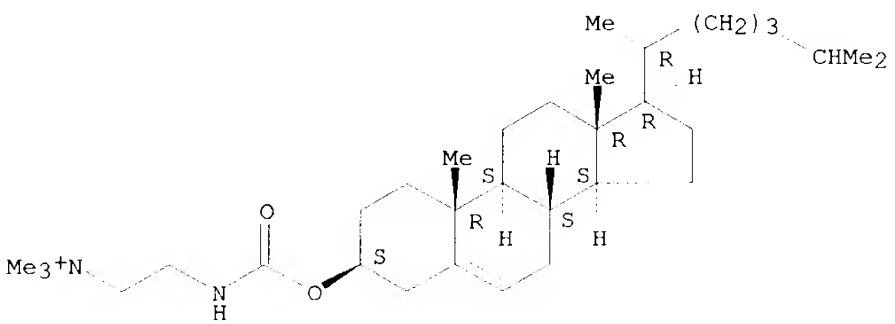
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001081044	A2	20010327	JP 1999-259717	19990914

PRIORITY APPLN. INFO.: JP 1999-259717 19990914

AB This invention relates to liposomes which contain nucleic acids and oligosaccharides bonded to antigen-presenting cell derived lectin. The liposomes provide **adjuvant** activities and are highly efficient in inducing cell-mediated immunity when administered to a host. A liposomal **vaccine** was prepd. contg. mannopentaose/dipalmitoylphosphatidylethanolamine, dipalmitoylphosphatidylcholine, and pCMV-.beta.Galplasmid.
IC ICM A61K039-00
ICS A61K009-127; A61K031-711; A61P037-04
CC 63-6 (Pharmaceuticals)
ST genetic liposome **vaccine** oligosaccharide lectin
IT Gene therapy
Vaccines
(genetic liposomal **vaccines** contg. oligosaccharides on surface)

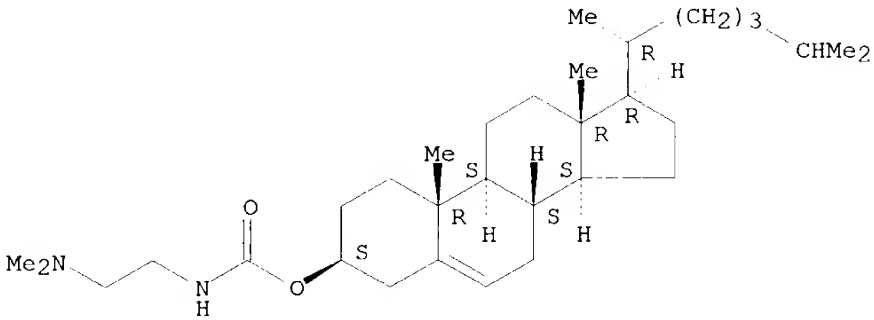
IT Agglutinins and Lectins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(genetic liposomal **vaccines** contg. oligosaccharides on surface)
IT DNA
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(genetic liposomal **vaccines** contg. oligosaccharides on surface)
IT Nucleic acids
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(genetic liposomal **vaccines** contg. oligosaccharides on surface)
IT Oligosaccharides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(genetic liposomal **vaccines** contg. oligosaccharides on surface)
IT Drug delivery systems
(liposomes; genetic liposomal **vaccines** contg. oligosaccharides on surface)
IT Plasmids
(pCMV-.beta.Gal; genetic liposomal **vaccines** contg. oligosaccharides on surface)
IT 57-88-5D, Cholesterol, glycolipids contg. 2644-64-6D, Dipalmitoylphosphatidylcholine, glycolipids contg. 5681-36-7D, Dipalmitoylphosphatidylethanolamine, glycolipids contg. 34141-02-1D, glycolipids contg. 71246-55-4D, glycolipids contg. 112828-69-0D, glycolipids contg. **129583-07-9D**, glycolipids contg. **137056-72-5D**, 3.beta.-[N-[2-(N,N-Dimethylamino)ethyl]carbamoyl]cholesterol, glycolipids contg. 149952-31-8D, glycolipids contg.
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(genetic liposomal **vaccines** contg. oligosaccharides on surface)
IT **129583-07-9D**, glycolipids contg. **137056-72-5D**, 3.beta.-[N-[2-(N,N-Dimethylamino)ethyl]carbamoyl]cholesterol, glycolipids contg.
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(genetic liposomal **vaccines** contg. oligosaccharides on surface)
RN 129583-07-9 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, ester with 2-(carboxyamino)-N,N,N-trimethylethanaminium (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 137056-72-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L27 ANSWER 11 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:207382 HCAPLUS
DOCUMENT NUMBER: 135:127008
TITLE: Formulations of single or multiple Helicobacter pylori antigens with DC-Chol **adjuvant** induce protection by the systemic route in mice. Optimal prophylactic combinations are different from therapeutic ones
AUTHOR(S): Sanchez, V.; Gimenez, S.; Haensler, J.; Geoffroy, C.; Rokbi, B.; Seguin, D.; Lissolo, L.; Harris, B.; Rizvi, F.; Kleanthous, H.; Monath, T.; Cadoz, M.; Guy, B.
CORPORATE SOURCE: Research Department, Campus Merieux, X2, Aventis Pasteur, Marcy l'Etoile, 69280, Fr.
SOURCE: FEMS Immunology and Medical Microbiology (2001), 30(2), 157-165
CODEN: FIMIEV; ISSN: 0928-8244
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The ability to induce a protective response against Helicobacter pylori infection has been investigated by systemic immunization of mice with urease formulated with the cationic lipid DC-Chol. This compd. acts both as a formulating agent and as an **adjuvant** and induces a balanced **Th1**/Th2 response shown to be more effective for protection in our previous studies. Urease-DC Chol induced a significant protection in prophylaxis but not in therapeutic immunization. The protection level was between 1.5 and 2 log redn. of bacterial d. measured by quant. culture compared to unimmunized-infected mice. In parallel, the protective efficacy of other H. pylori antigens formulated in a similar way and administered with DC-Chol was tested. These antigens were tested alone or in combination in prophylactic and therapeutic regimens. Some combinations of antigens induced a better prophylactic or therapeutic activity than urease alone (0.5-1.5 log further redn. in prophylaxis and therapy resp., P<0.05). The combinations that induced the best protection were different in prophylaxis and therapy. In conclusion, DC-Chol provides a convenient and efficient method to formulate different antigens

even when they are present in non-compatible buffers initially. Moreover, the results obtained in protection against H. pylori with such formulations should lead the way to future clin. trials.

CC 63-3 (Pharmaceuticals)
Section cross-reference(s): 15

ST cholesterol deriv **adjuvant** Helicobacter antigen **vaccine**

IT Immunostimulants
(**adjuvants**; prophylactic and therapeutic formulations of Helicobacter pylori antigens with DC-Chol **adjuvant** for protection against H. pylori infection)

IT Drug delivery systems
(liposomes; prophylactic and therapeutic formulations of Helicobacter pylori antigens with DC-Chol **adjuvant** for protection against H. pylori infection)

IT Helicobacter pylori
Vaccines
(prophylactic and therapeutic formulations of Helicobacter pylori antigens with DC-Chol **adjuvant** for protection against H. pylori infection)

IT Antigens
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prophylactic and therapeutic formulations of Helicobacter pylori antigens with DC-Chol **adjuvant** for protection against H. pylori infection)

IT **Immunization**
(**vaccination**; prophylactic and therapeutic formulations of Helicobacter pylori antigens with DC-Chol **adjuvant** for protection against H. pylori infection)

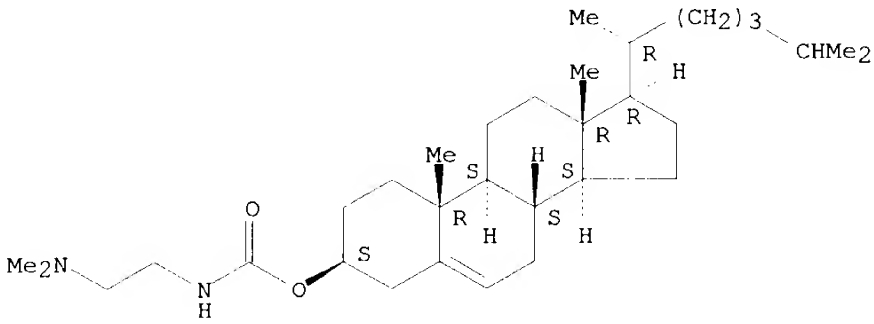
IT 9002-13-5, Urease **137056-72-5**, DC-Chol
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prophylactic and therapeutic formulations of Helicobacter pylori antigens with DC-Chol **adjuvant** for protection against H. pylori infection)

IT **137056-72-5**, DC-Chol
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prophylactic and therapeutic formulations of Helicobacter pylori antigens with DC-Chol **adjuvant** for protection against H. pylori infection)

RN 137056-72-5 HCAPLUS

CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 12 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:167832 HCAPLUS
DOCUMENT NUMBER: 134:212748
TITLE: Lipid-nucleic acid compositions for stimulating cytokine secretion and inducing an immune response
INVENTOR(S): Semple, Sean C.; Harasym, Troy O.; Klimuk, Sandra K.; Kojic, Ljiljiana D.; Bramson, Jonathan L.; Mui, Barbara; Hope, Michael J.
PATENT ASSIGNEE(S): Inex Pharmaceuticals Corp., Can.
SOURCE: PCT Int. Appl., 94 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001015726	A2	20010308	WO 2000-CA1013	20000828
WO 2001015726	A3	20010726		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2000068139	A5	20010326	AU 2000-68139	20000828
BR 2000013834	A	20020423	BR 2000-13834	20000828
EP 1212085	A2	20020612	EP 2000-956004	20000828
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				

PRIORITY APPLN. INFO.:
US 2000-176406P P 20000113
US 1999-151211P P 19990826
WO 2000-CA1013 W 20000828

AB Lipid-nucleic acid particles can provide therapeutic benefits, even when the nucleic acid is not complementary to coding sequences in target cells. It has been found that lipid-nucleic acid particles, including those contg. non-sequence specific oligodeoxynucleotides, can be used to

stimulate cytokine secretion, thus enhancing the overall immune response of a treated **mammal**. Further, immune response to specific target antigens can be induced by administration of an antigenic mol. in assocn. with lipid particles contg. non-sequence specific oligodeoxynucleotides. The nucleic acid which is included in the lipid-nucleic acid particle can be a phosphodiester (i.e., an oligodeoxynucleotide consisting of nucleotide residues joined by phosphodiester linkages) or a modified nucleic acid which includes phosphorothioate or other modified linkages, and may suitably be one which is non-complementary to the human genome, such that it acts to provide immunostimulation in a manner which is independent of conventional base-pairing interactions between the nucleic acid and nucleic acids of the treated **mammal**. In particular, the nucleic acid may suitably contain an immune-stimulating motif such as a CpG motif, or an immune stimulating palindromic sequence. The cationic lipid included in the nucleic acid particles may be suitably selected from among DODAP, DODMA, DMDMA, DOTAP, DC-Chol, DDAB, DODAC, DMRIE, DOSPA and DOGS. In addn., the lipid particle may suitably contain a modified aggregation-limiting lipid such as a PEG-lipid, a PAO-lipid or a ganglioside.

IC A61K039-39

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1, 15

ST lipid nucleic acid **vaccine** cytokine induction

IT **Vaccines**
(tumor; lipid-nucleic acid compns. for stimulating cytokine secretion and inducing an immune response)

IT Antitumor agents
(**vaccines**; lipid-nucleic acid compns. for stimulating cytokine secretion and inducing an immune response)

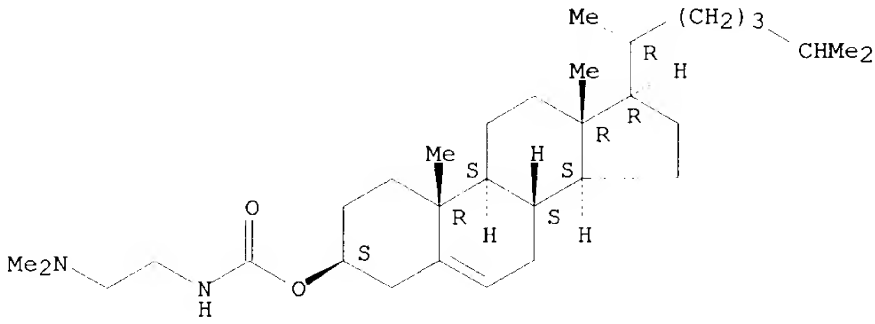
IT 7212-69-3, DODAC 25322-68-3D, Polyethylene glycol, lipid conjugates 124050-77-7, DOGS **137056-72-5**, Dc-chol 144189-73-1, Dotap 153312-64-2, DMRIE 329009-00-9
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(lipid-nucleic acid compns. for stimulating cytokine secretion and inducing an immune response)

IT **137056-72-5**, Dc-chol
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(lipid-nucleic acid compns. for stimulating cytokine secretion and inducing an immune response)

RN 137056-72-5 HCAPLUS

CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L27 ANSWER 13 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:115313 HCAPLUS
DOCUMENT NUMBER: 134:158465
TITLE: Cationic lipid compounds and their synthesis and use for transfection and therapy
INVENTOR(S): Taillandier, Eliane; Cao, Xuan An; Coudert, Robert; Naejus, Regine
PATENT ASSIGNEE(S): Universite Paris Nord, Fr.
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001011068	A2	20010215	WO 2000-FR2234	20000803
WO 2001011068	A3	20020502		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2797188	A1	20010209	FR 1999-10141	19990804
EP 1218033	A2	20020703	EP 2000-956608	20000803
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				

PRIORITY APPLN. INFO.: FR 1999-10141 A 19990804
WO 2000-FR2234 W 20000803

OTHER SOURCE(S): MARPAT 134:158465

AB The invention concerns the use of a monocationic lipid compds. R1O-CO-NH-(CH2)n-N+(C2H5)3 I- (R1 = cholesteryl; n = 1-3) or R2-CO-NH-(CH2)n-N+(R)3 X- (R2 = abietic acid, or cholanic acid derivs.; R = Me, Et; n = 2, 3; X = Cl-, I-) and/or dicationic lipid compds. R1O-CO-N[CH2- CH2-N+(R)3 X-]2 or R1O-CO-CH2-CH2-CO-N[CH2-CH2-N+(R)3 X-]2 or R2-CO-N[CH2-CH2-N+(R)3 X-]2 (R1 = cholesteryl; R2 = abietic acid, cholanic acid derivs.; R = H, Me, Et; X = Cl-, I-). Said compds. are

useful for transfecting living organisms in vivo, organs in vivo, tumors in vivo, or cells in vitro or ex vivo. Thus, 3-.beta.-[N-(N',N',N'-triethylaminopropane iodide)carbamoyl] cholesterol and other cationic lipids were synthesized. Transfection of CEM cells using this lipid was approx. 36-fold more efficient than with lipofectin.

IC ICM C12N015-87
CC 3-1 (Biochemical Genetics)
Section cross-reference(s): 32

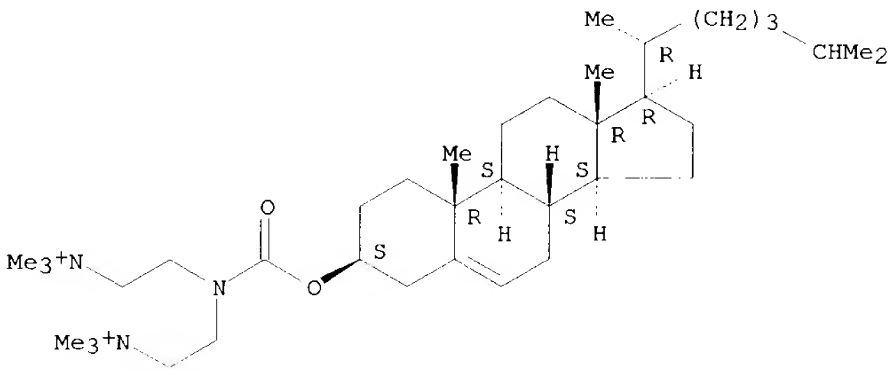
IT **Immunization**
(**vaccination**, with nucleic acid **vaccines**; cationic lipid compds. and their synthesis and use for transfection and therapy)

IT 131333-65-8P 140674-58-4P 140674-62-0P 140680-60-0P 325719-58-2P
325719-59-3P 325719-60-6P 325719-61-7P 325719-62-8P 325719-63-9P
325719-64-0P **325719-65-1P** 325719-66-2P 325719-67-3P
325719-68-4P 325719-69-5P 325719-70-8P 325719-71-9P 325719-72-0P
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cationic lipid compds. and their synthesis and use for transfection and therapy)

IT **325719-65-1P**
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cationic lipid compds. and their synthesis and use for transfection and therapy)

RN 325719-65-1 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, bis[2-(trimethylammonio)ethyl]carbamate, diiodide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



●2 I⁻

L27 ANSWER 14 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:114958 HCAPLUS
DOCUMENT NUMBER: 134:168319
TITLE: Periodic structures comprising lipids, polyelectrolytes, and structure-inducing soluble oligovalent linkers, and biological use thereof

INVENTOR(S): Cevc, Gregor; Huebner, Stefan
PATENT ASSIGNEE(S): Idea Ag, Germany
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001010413	A2	20010215	WO 2000-EP7546	20000803
WO 2001010413	A3	20010816		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

JP 2003506398	T2	20030218	JP 2001-514933	20000803

PRIORITY APPLN. INFO.: DE 1999-19936665 A 19990804
WO 2000-EP7546 W 20000803

AB This invention describes a method for prepg. pharmaceutically usable compns. comprising periodic structures consisting of polyelectrolytes sandwiched between lipid aggregates having at least one charged component which is characterized in that a suspension of non-periodic, preferably mono- or bilayer like, lipid aggregates, a soln. of polyelectrolyte mols., and a soln. of oligovalent linkers are sep. made and then mixed to form said periodic structures, the simultaneous presence of said components catalyzing the formation of controlling the rate of formation of said periodic structures comprising at least one layer of lipid component assocd. with a layer of polyelectrolyte mols.

IC ICM A61K009-127
CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 3, 15

IT **Immunization**
(**vaccination;** periodic structures comprising lipids, polyelectrolytes, and structure-inducing sol. oligovalent linkers, and biol. use thereof)

IT 54-85-3, Isonicotinic acid hydrazide 57-56-7, Semicarbazide 60-35-5, Acetamide, biological studies 67-62-9, Methoxyamine 71-44-3, Spermine 74-89-5, Methylamine, biological studies 75-04-7, Ethylamine, biological studies 75-50-3, Trimethylamine, biological studies 79-05-0, Propionamide 107-10-8, n-Propylamine, biological studies 107-15-3, Ethylenediamine, biological studies 109-73-9, n-Butylamine, biological studies 109-76-2, 1,3-Diaminopropane 109-85-3, 2-Methoxyethylamine 109-89-7, Diethylamine, biological studies 110-60-1, Putrescine 110-76-9, 2-Ethoxyethylamine 121-44-8, Triethylamine, biological studies 124-20-9, Spermidine 124-40-3, Dimethylamine, biological studies 141-43-5, Ethanolamine, biological studies 143-19-1, Sodium oleate 302-01-2, Hydrazine, biological studies 302-95-4, Sodium deoxycholate 462-94-2, Cadaverine 590-88-5, 1,3-Diaminobutane 629-25-4, Sodium laurate 822-12-8, Sodium myristate 822-17-3, Sodium linoleate 3282-73-3, DDAB 16409-34-0, Sodium glycodeoxycholate 18175-45-6,

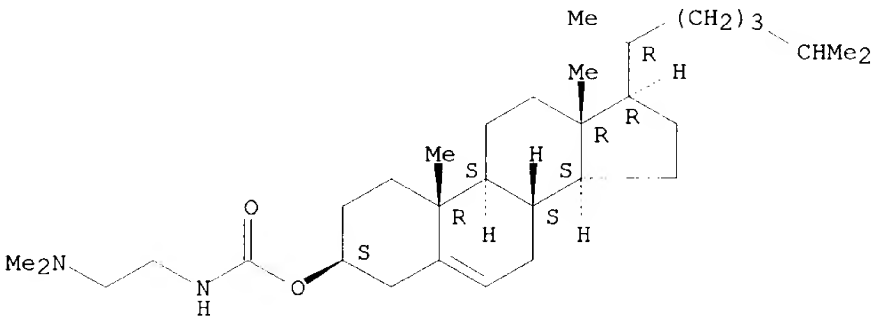
Sodium elaidate 104162-48-3, Dotma 124050-77-7 **137056-72-5**, Dc-chol 144189-73-1, Dotap 153312-64-2, Dmrie 168479-03-6, DOSPA 169619-96-9, Dotim
RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(periodic structures comprising lipids, polyelectrolytes, and structure-inducing sol. oligovalent linkers, and biol. use thereof)

IT **137056-72-5**, Dc-chol
RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(periodic structures comprising lipids, polyelectrolytes, and structure-inducing sol. oligovalent linkers, and biol. use thereof)

RN 137056-72-5 HCAPLUS

CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L27 ANSWER 15 OF 28 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:90882 HCAPLUS

DOCUMENT NUMBER: 136:10987

TITLE: Design, characterization and preclinical efficacy of a cationic lipid **adjuvant** for **influenza** split **vaccine**

AUTHOR(S): Guy, B.; Pascal, N.; Francon, A.; Bonnin, A.; Gimenez, S.; Lafay-Vialon, E.; Trannoy, E.; Haensler, J.

CORPORATE SOURCE: Aventis Pasteur, Marcy l'Etoile, 69280, Fr.

SOURCE: Vaccine (2001), 19(13-14), 1794-1805
CODEN: VACCDE; ISSN: 0264-410X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We prepd. a series of cationic lipid vesicles comprising a cationic cholesterol deriv., DC-Chol with or without a neutral phospholipid, DOPC or DOPE. The vesicles were tested for their ability to bind and **adjuvant** split inactivated **influenza vaccines**. We found that DC-Chol-contg. liposomes are capable to strongly bind **influenza vaccine** antigens upon simple mixing with the **vaccine**. The resulting formulations induced robust anti-**influenza** immune responses both after s.c. and i.n. administration in BALB/c mice while neutral Cholesterol/DOPC liposomes displayed virtually no stable antigen binding and no **adjuvant** effect. The

parenteral **adjuvant** effect of DC-Chol on trivalent split **influenza vaccines** was then confirmed in outbred mice and monkeys. Among the most potent formulations tested, a simple mixt. of the **vaccine** with a microfluidized dispersion of DC-Chol in an aq. buffer is being considered for further development to produce an improved **influenza vaccine**.

CC 63-3 (Pharmaceuticals)

ST **influenza vaccine** cationic lipid **adjuvant**

IT **Influenza**
Vaccines
(design, characterization and preclin. efficacy of a cationic lipid **adjuvant** for **influenza** split **vaccine**)

IT Drug delivery systems
(liposomes; design, characterization and preclin. efficacy of a cationic lipid **adjuvant** for **influenza** split **vaccine**)

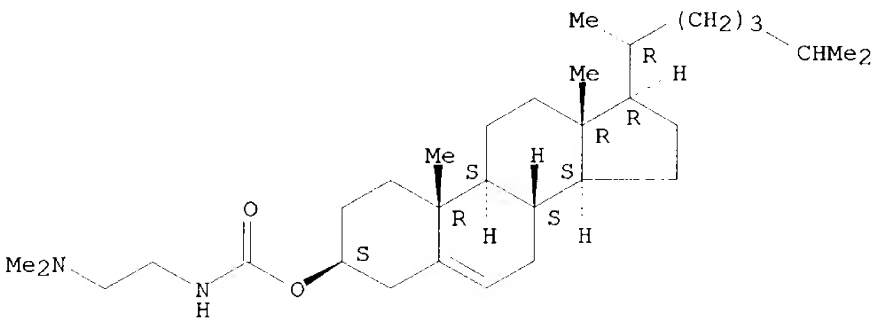
IT **137056-72-5**, DC-Chol
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(design, characterization and preclin. efficacy of a cationic lipid **adjuvant** for **influenza** split **vaccine**)

IT **137056-72-5**, DC-Chol
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(design, characterization and preclin. efficacy of a cationic lipid **adjuvant** for **influenza** split **vaccine**)

RN 137056-72-5 HCAPLUS

CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 16 OF 28 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:420985 HCAPLUS

DOCUMENT NUMBER: 133:57573

TITLE: Multivalent immunogenic composition containing RSV subunit composition and **influenza** virus preparation

INVENTOR(S): Cates, George A.; Sambhara, Suryaprakash; Burt, David; Klein, Michel H.

PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000035481	A2	20000622	WO 1999-CA1194	19991216
WO 2000035481	A3	20001026		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1140164	A2	20011010	EP 1999-957825	19991216
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.: US 1998-213770 A 19981217
WO 1999-CA1194 W 19991216

AB Immunogenic compns. for administration to adults, particularly to the elderly, to protect them against disease caused by infection by respiratory syncytial virus and by **influenza** virus comprise an immunoeffective amt. of a mixt. of purified fusion (F) protein, attachment (G) protein and matrix (M) protein of RSV and an immunoeffective amt. of a non-virulent **influenza** virus prepn. The components of the compn., when formulated as a **vaccine** for in vivo administration, do not impair the immunogenicity of each other. The immunogenic compn. may also contain an **adjuvant**.

IC ICM A61K039-295
ICS A61P031-12
CC 15-2 (Immunochemistry)
ST **vaccine** elderly respiratory syncytial virus **influenza**; RSV F G M protein **vaccine**
IT Proteins, specific or class
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(F; multivalent immunogenic compn. contg. purified F protein, G protein and M protein of respiratory syncytial virus and nonvirulent **influenza** virus)
IT Proteins, specific or class
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(M (matrix); multivalent immunogenic compn. contg. purified F protein, G protein and M protein of respiratory syncytial virus and nonvirulent **influenza** virus)
IT Polyphosphazenes
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**adjuvant**; multivalent immunogenic compn. contg. purified F protein, G protein and M protein of respiratory syncytial virus and nonvirulent **influenza** virus)
IT Immunostimulants
(**adjuvants**, ISCOMs; multivalent immunogenic compn. contg.

purified F protein, G protein and M protein of respiratory syncytial virus and nonvirulent **influenza** virus)

IT Immunostimulants
(**adjuvants**, ISCOPREP; multivalent immunogenic compn. contg. purified F protein, G protein and M protein of respiratory syncytial virus and nonvirulent **influenza** virus)

IT Immunostimulants
(**adjuvants**; multivalent immunogenic compn. contg. purified F protein, G protein and M protein of respiratory syncytial virus and nonvirulent **influenza** virus)

IT Proteins, specific or class
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(attachment; multivalent immunogenic compn. contg. purified F protein, G protein and M protein of respiratory syncytial virus and nonvirulent **influenza** virus)

IT Toxins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bacterial; multivalent immunogenic compn. contg. purified F protein, G protein and M protein of respiratory syncytial virus and nonvirulent **influenza** virus)

IT Aging, animal
(elderly, **vaccine**; multivalent immunogenic compn. contg. purified F protein, G protein and M protein of respiratory syncytial virus and nonvirulent **influenza** virus)

IT Capsules
Immunomodulators
Influenza virus
Liposomes
Microparticles
Respiratory syncytial virus
Vaccines
(multivalent immunogenic compn. contg. purified F protein, G protein and M protein of respiratory syncytial virus and nonvirulent **influenza** virus)

IT Antigens
Cytokines
Glycolipids
Interleukin 2
Lipoproteins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(multivalent immunogenic compn. contg. purified F protein, G protein and M protein of respiratory syncytial virus and nonvirulent **influenza** virus)

IT Amino acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(octadecyl esters; multivalent immunogenic compn. contg. purified F protein, G protein and M protein of respiratory syncytial virus and nonvirulent **influenza** virus)

IT 1305-62-0, Calcium hydroxide, biological studies 7784-30-7, Aluminum phosphate 10103-46-5, Calcium phosphate 21645-51-2, Aluminum hydroxide, biological studies 53678-77-6, Muramyl dipeptide **137056-72-5**, DC-Chol 277303-29-4, DDBA 277333-71-8
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**adjuvant**; multivalent immunogenic compn. contg. purified F protein, G protein and M protein of respiratory syncytial virus and nonvirulent **influenza** virus)

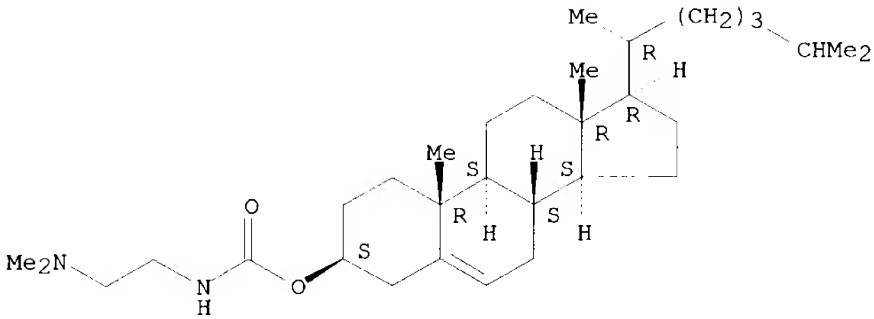
IT 20427-58-1, Zinc hydroxide 66594-14-7, Quil A 141256-04-4, QS-21

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(multivalent immunogenic compn. contg. purified F protein, G protein and M protein of respiratory syncytial virus and nonvirulent **influenza** virus)

IT **137056-72-5**, DC-Chol
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**adjuvant**; multivalent immunogenic compn. contg. purified F protein, G protein and M protein of respiratory syncytial virus and nonvirulent **influenza** virus)

RN 137056-72-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L27 ANSWER 17 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:420981 HCAPLUS
DOCUMENT NUMBER: 133:57570
TITLE: Multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease
INVENTOR(S): Loosmore, Sheena M.; Yang, Yan-ping; Klein, Michel H.
PATENT ASSIGNEE(S): Connaught Laboratories Ltd., Can.
SOURCE: PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000035477	A2	20000622	WO 1999-CA1189	19991215
WO 2000035477	A3	20001026		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,

CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
CA 2355466 AA 20000622 CA 1999-2355466 19991215
EP 1140158 A2 20011010 EP 1999-957822 19991215
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
JP 2002532433 T2 20021002 JP 2000-587796 19991215
PRIORITY APPLN. INFO.: US 1998-210995 A 19981215
WO 1999-CA1189 W 19991215

AB A multi-component immunogenic compn. confers protection on an immunized host against infection caused by Haemophilus influenzae . Such compn. comprises at least two different antigens of Haemophilus influenzae , one of which is an adhesin. High mol. wt. (HMW) proteins of non-typeable Haemophilus influenzae enhance the immune response in a host to a non-proteolytic analog of Hin47 protein in such immunogenic compns. with one component not impairing the immunogenicity of the other. The Haemophilus **vaccine** may be combined with DTP component **vaccines** to provide a multi-valent component **vaccine** without impairment of the immunogenic properties of the other antigens.

IC ICM A61K039-102
ICS A61K039-116; A61K039-295; A61P031-04

CC 15-2 (Immunochemistry)
Section cross-reference(s): 3

ST **vaccine** Hemophilus **influenza** adhesin HMW1 HMW2; heat shock protein Hin47 **influenza vaccine**

IT **Hemagglutinins**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(FHA (filamentous **hemagglutinin**); multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Proteins, specific or class
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(HMW1; multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Proteins, specific or class
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(HMW2; multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Proteins, specific or class
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Hin47; multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Immunostimulants
(**adjuvants**, ISCOMs; multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Immunostimulants
(**adjuvants**, ISCOPREP and DDBA; multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Agglutinins and Lectins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(agglutinogens; multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Pertussis
(antigen; multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Toxins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bacterial; multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Polysaccharides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(capsular; multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Mutation
(deletion; multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Toxoids
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(diphtheria; multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Proteins, specific or class
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(high-mol.-wt.; multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Haemophilus influenzae
Human poliovirus
Human poliovirus 1
Human poliovirus 2
Human poliovirus 3
Molecular cloning
Pathogen
Vaccines
(multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Adhesins
Antigens
Glycolipids
Lipoproteins
Polyphosphazenes
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Heat-shock proteins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-proteolytic; multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Amino acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(octadecyl ester; multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Ear
(otitis, otitis media; multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Agglutinins and Lectins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pertactins; multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Toxoids
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pertussis; multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT Mutation

(substitution; multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

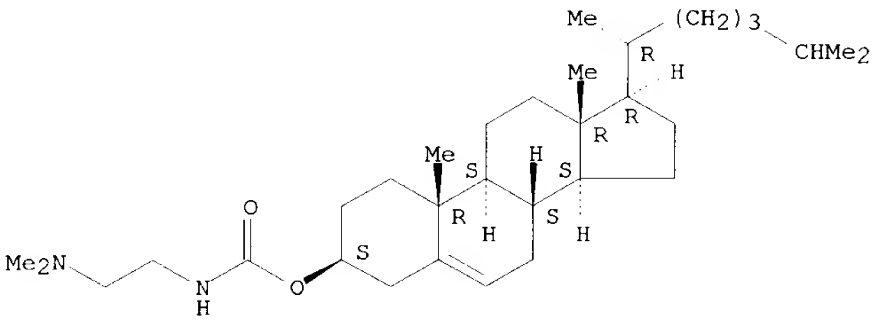
IT Toxoids
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tetanus; multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT 1305-62-0, Calcium hydroxide, biological studies 7784-30-7, Aluminum phosphate 10103-46-5, Calcium phosphate 20427-58-1, Zinc hydroxide 21645-51-2, Aluminum hydroxide, biological studies 53678-77-6, Muramyl dipeptide 66594-14-7, Quil A **137056-72-5**, DC-chol 141256-04-4, QS 21
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

IT **137056-72-5**, DC-chol
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(multi-component **vaccine** comprising at least two antigens from Haemophilus influenzae to protect against disease)

RN 137056-72-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L27 ANSWER 18 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:34710 HCAPLUS
DOCUMENT NUMBER: 132:83616
TITLE: Use of an amphipathic compound for providing an **adjuvant** to a subunit **vaccine**
INVENTOR(S): Darbouret, Anne; Brunel, Florence; Ronco, Jorge
PATENT ASSIGNEE(S): Pasteur Merieux Serums & Vaccins, Fr.
SOURCE: PCT Int. Appl., 11 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000001345	A2	20000113	WO 1999-FR1604	19990702

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,

DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

FR 2781160	A1	20000121	FR 1998-8700	19980703
FR 2781160	B1	20000818		
CA 2337048	AA	20000113	CA 1999-2337048	19990702
AU 9946217	A1	20000124	AU 1999-46217	19990702
EP 1093382	A2	20010425	EP 1999-929389	19990702
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6472159	B1	20021029	US 2001-720863	20010416

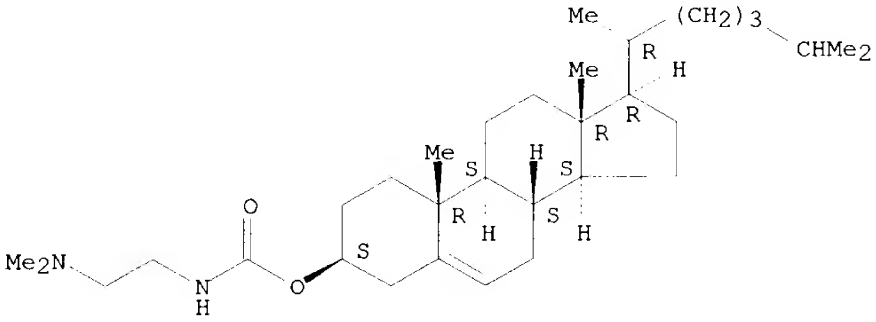
PRIORITY APPLN. INFO.: FR 1998-8700 A 19980703
WO 1999-FR1604 W 19990702

AB An amphipathic compd. for prepg. a **vaccine** compn. comprising at least a subunit antigen to be administered to target populations comprising non-responders to said antigen is disclosed. A particular amphipathic compd. is 3-.beta.-[N-(N',N'-dimethylaminoethane)-carbamoyl]cholesterol (I). A **vaccine** contained hepatitis B antigen 1.mu.g, I 0.5 mg, and buffer q.s. 0.5 mL. The efficacy of the **vaccine** in immunization of guinea pigs is shown.

IC ICM A61K
CC 63-3 (Pharmaceuticals)
ST **vaccine** amphipathic compd **adjuvant**; carbamoyl cholesterol **vaccine adjuvant**
IT Immunostimulants
(**adjuvants**; use of amphipathic compd. for providing **adjuvant** to subunit **vaccine**)
IT **Vaccines**
(hepatitis B; use of amphipathic compd. for providing **adjuvant** to subunit **vaccine**)
IT Antigens
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hepatitis B; use of amphipathic compd. for providing **adjuvant** to subunit **vaccine**)
IT **Vaccines**
(use of amphipathic compd. for providing **adjuvant** to subunit **vaccine**)
IT **137056-72-5**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(use of amphipathic compd. for providing **adjuvant** to subunit **vaccine**)
IT **137056-72-5**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(use of amphipathic compd. for providing **adjuvant** to subunit **vaccine**)
RN 137056-72-5 HCAPLUS

CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L27 ANSWER 19 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:318977 HCAPLUS
DOCUMENT NUMBER: 131:143208
TITLE: Cationic lipid DC-Chol induces an improved and balanced immunity able to overcome the unresponsiveness to the hepatitis B **vaccine**
AUTHOR(S): Brunel, F.; Darbouret, A.; Ronco, J.
CORPORATE SOURCE: Research Department, Pasteur Merieux Connaught, Marcy L'Etoile, 69280, Fr.
SOURCE: Vaccine (1999), 17(17), 2192-2203
CODEN: VACCDE; ISSN: 0264-410X
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB **Th1** and Th2 immune responses against antigens can be modulated by the use of **adjuvants**. Since antibody isotypes (IgG1 and IgG2a) and cytokines induced may reflect the Th differentiation taking place during the immune response, the **humoral** and cellular immune responses induced in mice against hepatitis B virus surface antigen (HBsAg) were examd. when the antigen was either adsorbed to aluminum hydroxyde or administered with a new **adjuvant** the cationic lipid 3.beta.-[N-(N',N'-dimethylaminoethane)carbamoyl]cholesterol (DC-Chol). The use of DC-Chol increased antibody responses in responding BALB/c mice, induced more consistent IgG1 and IgG2a antibody responses in OF1 mice and overcame the nonresponse to HBsAg in B10.M mice. Furthermore, DC-Chol was able to induce cellular immune responses to HBsAg. The DC-Chol induced a balanced **Th1**/Th2 response, which enabled mice to overcome the inherited unresponsiveness to HBsAg encountered with aluminum-adjuvanted **vaccine**. Thus, the DC-Chol provides a signal to switch on both **Th1** and Th2 responses, which may have important implications for **vaccination** against hepatitis B virus, as well as for enhancing weak immunogenicity of other recombinant purified antigens in a nonresponder population.

CC 15-2 (Immunochemistry)
Section cross-reference(s): 1, 63
ST cationic lipid **adjuvant** DC Chol hepatitis B **vaccine**
IT Immunoglobulins

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)
(G1; cationic lipid DC-Chol induces improved and balanced immunity able to overcome unresponsiveness to hepatitis B **vaccine** and formation of)

IT Immunoglobulins
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)
(G2a; cationic lipid DC-Chol induces improved and balanced immunity able to overcome unresponsiveness to hepatitis B **vaccine** and formation of)

IT Immunostimulants
(**adjuvants**; cationic lipid DC-Chol induces improved and balanced immunity able to overcome unresponsiveness to hepatitis B **vaccine**)

IT Hepatitis B virus
Vaccines
(cationic lipid DC-Chol induces improved and balanced immunity able to overcome unresponsiveness to hepatitis B **vaccine**)

IT T cell (lymphocyte)
(helper cell/inducer, **TH1**; cationic lipid DC-Chol induces improved and balanced immunity able to overcome unresponsiveness to hepatitis B **vaccine**)

IT T cell (lymphocyte)
(helper cell/inducer, TH2; cationic lipid DC-Chol induces improved and balanced immunity able to overcome unresponsiveness to hepatitis B **vaccine**)

IT Antigens
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hepatitis B surface, recombinant; cationic lipid DC-Chol induces improved and balanced immunity able to overcome unresponsiveness to hepatitis B **vaccine**)

IT **137056-72-5**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cationic lipid DC-Chol induces improved and balanced immunity able to overcome unresponsiveness to hepatitis B **vaccine**)

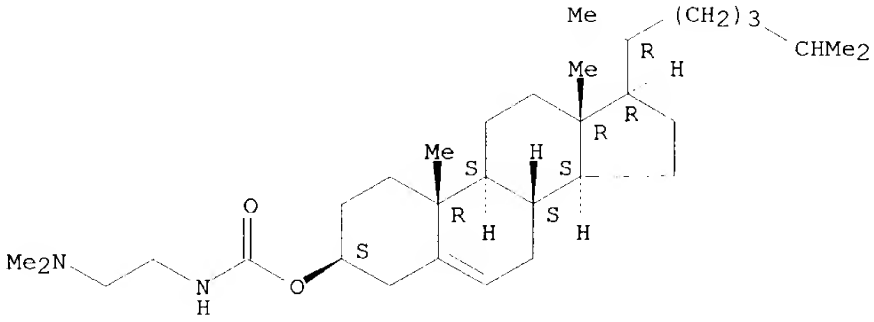
IT 21645-51-2, Aluminum hydroxide, biological studies
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(cationic lipid DC-Chol induces improved and balanced immunity able to overcome unresponsiveness to hepatitis B **vaccine** compared to)

IT **137056-72-5**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cationic lipid DC-Chol induces improved and balanced immunity able to overcome unresponsiveness to hepatitis B **vaccine**)

RN 137056-72-5 HCAPLUS

CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 20 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:721602 HCAPLUS
DOCUMENT NUMBER: 129:342686
TITLE: Anti-Helicobacter **vaccine** composition comprising a **Th1 adjuvant**
INVENTOR(S): Guy, Bruno; Haensler, Jean
PATENT ASSIGNEE(S): Merieux Oravax, Fr.
SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9848836	A1	19981105	WO 1998-FR875	19980430
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
FR 2762787	A1	19981106	FR 1997-5608	19970430
FR 2762787	B1	20001006		
AU 9876584	A1	19981124	AU 1998-76584	19980430
AU 750379	B2	20020718		
EP 979100	A1	20000216	EP 1998-924360	19980430
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
BR 9809381	A	20000704	BR 1998-9381	19980430
JP 2002505665	T2	20020219	JP 1998-546684	19980430

PRIORITY APPLN. INFO.:
FR 1997-5608 A 19970430
FR 1997-15732 A 19971208
WO 1998-FR875 W 19980430

OTHER SOURCE(S): MARPAT 129:342686

AB The invention concerns the use of an immunogenic agent derived from Helicobacter, assocd. with an **adjuvant** such as QS-21, DC-chol or Bay R1005, for making a pharmaceutical compn. designed to induce an immune response of the T helper 1 type (**Th1**), for preventing or treating Helicobacter infection in a **mammal**.

IC ICM A61K039-106

CC 15-2 (Immunochemistry)
Section cross-reference(s): 63

ST Helicobacter **vaccine Th1 adjuvant**

IT Immunoglobulins
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(A; anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

IT Immunoglobulins
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(G1; anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

IT Immunoglobulins
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(G2a; anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

IT Peptides, biological studies
Proteins, general, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Helicobacter; anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

IT Polyphosphazenes
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(PCPP; anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

IT Immunostimulants
(**adjuvants**; anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

IT Antibacterial agents
Drug delivery systems
Helicobacter
Helicobacter pylori
Vaccines
(anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

IT Glycolipopeptides
Saponins
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

IT Lipids, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(cationic; anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

IT Immunity
(cell-mediated; anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

IT Toxins
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(cholera; anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

IT Escherichia coli
(heat-labile toxin; anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

IT Toxins
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(heat-labile, E.coli; anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

IT T cell (lymphocyte)
(helper cell/inducer, **TH1**; anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

IT Drug delivery systems
(liposomes; anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

IT Quillaja saponaria
(saponins; anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

IT 9002-13-5, Urease
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Helicobacter, UreA or UreB subunit; anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

IT 57-88-5D, Cholesterol, derivs. **137056-72-5** 294664-93-0, Bay R1005
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

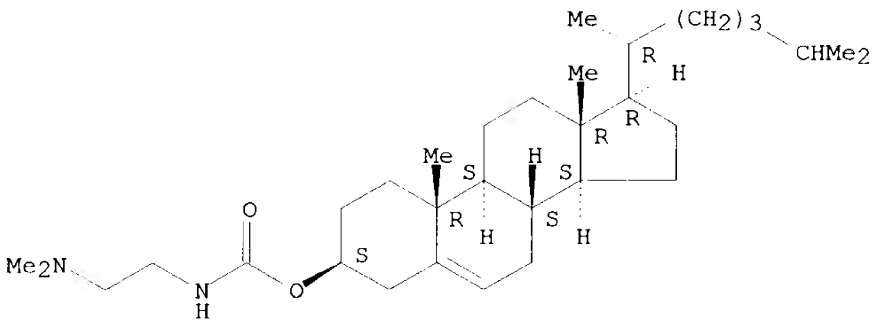
IT 141436-78-4, Protein kinase C
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

IT **137056-72-5**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anti-Helicobacter **vaccine** compn. with **Th1 adjuvant**)

RN 137056-72-5 HCAPLUS

CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 21 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:719294 HCAPLUS
DOCUMENT NUMBER: 129:342685
TITLE: Anti-Helicobacter **vaccine** for use by the subdiaphragmatic systemic route and combined **mucosal**/parenteral immunization
INVENTOR(S): Guy, Bruno; Haensler, Jean; Lee, Cynthia K.; Weltzin, Richard A.; Monath, Thomas P.
PATENT ASSIGNEE(S): Merieux Oravax, Fr.
SOURCE: PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9848835	A1	19981105	WO 1998-US8890	19980430
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
FR 2762788	A1	19981106	FR 1997-5609	19970430
FR 2762788	B1	20001006		
AU 9872768	A1	19981124	AU 1998-72768	19980430
AU 751433	B2	20020815		
BR 9809426	A	20000613	BR 1998-9426	19980430
EP 1017417	A1	20000712	EP 1998-920126	19980430
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
JP 2002512619	T2	20020423	JP 1998-547441	19980430
NO 9905290	A	19991229	NO 1999-5290	19991029

PRIORITY APPLN. INFO.:
FR 1997-5609 A 19970430
FR 1997-15731 A 19971208
WO 1998-US8890 W 19980430

AB The subject of the invention is the use of an immunogenic agent (e.g.,

urease) derived from Helicobacter, in the manuf. of a pharmaceutical compn. intended for the induction of a T helper 1 (**Th1**) type immune response against Helicobacter in order to prevent or treat a Helicobacter infection. This may be achieved when the pharmaceutical compn. is administered by the systemic or parenteral route to the dorsolumbar region of the diaphragm. Also included in the invention is a **mucosal**/parenteral immunization method for the prevention or treatment of Helicobacter infection.

IC ICM A61K039-02
ICS A01N043-04; A61K031-70

CC 15-2 (Immunochemistry)
Section cross-reference(s): 14

ST Helicobacter **vaccine** subdiaphragmatic immunization

IT Toxins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Clostridium difficile; as **adjuvant** in subdiaphragmatic systemic and **mucosal**/parenteral immunization against Helicobacter infection)

IT Immunoglobulins
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(G1; as marker for **Th1** cell response in immunization against Helicobacter infection)

IT Immunoglobulins
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(G2a; as marker for **Th1** cell response in immunization against Helicobacter infection)

IT Immunostimulants
(**adjuvants**; in subdiaphragmatic systemic and **mucosal**/parenteral immunization against Helicobacter infection)

IT Alums
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as **adjuvant** in subdiaphragmatic systemic and **mucosal**/parenteral immunization against Helicobacter infection)

IT Infection
(bacterial; urease subunits in subdiaphragmatic systemic and **mucosal**/parenteral immunization against Helicobacter infection)

IT Toxins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cholera; as **adjuvant** in subdiaphragmatic systemic and **mucosal**/parenteral immunization against Helicobacter infection)

IT Toxins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(enterotoxins, heat-labile; as **adjuvant** in subdiaphragmatic systemic and **mucosal**/parenteral immunization against Helicobacter infection)

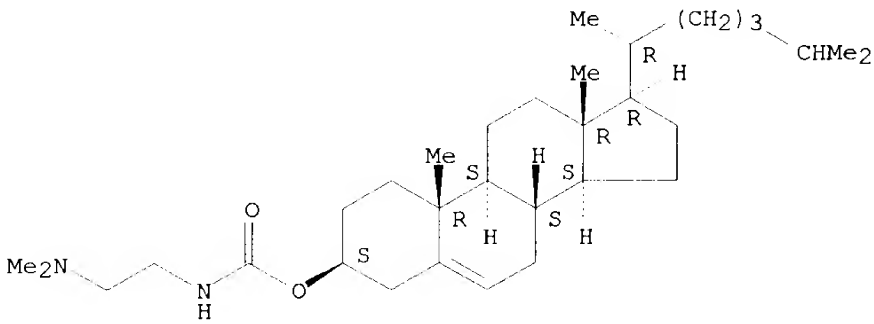
IT Immunoassay
(enzyme-linked immunosorbent assay; in detection of IgG1/IgG2a ratio as marker for **Th1** cell response in immunization against Helicobacter infection)

IT Microspheres
(for delivery of urease subunits in subdiaphragmatic systemic and **mucosal**/parenteral immunization against Helicobacter infection)

IT T cell (lymphocyte)
(helper cell/inducer, **TH1**; urease subunits in subdiaphragmatic systemic and **mucosal**/parenteral immunization

against Helicobacter infection)
IT Drug delivery systems
(liposomes; for delivery of urease subunits in subdiaphragmatic systemic and **mucosal**/parenteral immunization against Helicobacter infection)
IT Immunization
(**mucosal**; with urease subunits of Helicobacter pylori)
IT Antigens
Gene, microbial
Lipopeptides
Peptides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(of Helicobacter for subdiaphragmatic systemic and **mucosal**/parenteral immunization against infection)
IT **Vaccines**
(oral; urease subunits in immunization against Helicobacter infection)
IT Toxins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pertussis; as **adjuvant** in subdiaphragmatic systemic and **mucosal**/parenteral immunization against Helicobacter infection)
IT **Vaccines**
(urease subunits in subdiaphragmatic systemic and **mucosal**/parenteral immunization against Helicobacter infection)
IT Antiulcer agents
(urease subunits in subdiaphragmatic systemic and **mucosal**/parenteral immunization against Helicobacter infection in relation to)
IT Helicobacter
Helicobacter pylori
(urease subunits in subdiaphragmatic systemic and **mucosal**/parenteral immunization against infection with)
IT **137056-72-5** 141256-04-4, QS-21 294664-93-0, Bay R1005
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as **adjuvant** in subdiaphragmatic systemic and **mucosal**/parenteral immunization against Helicobacter infection)
IT 9002-13-5, Urease
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(in subdiaphragmatic systemic and **mucosal**/parenteral immunization against Helicobacter infection)
IT **137056-72-5**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as **adjuvant** in subdiaphragmatic systemic and **mucosal**/parenteral immunization against Helicobacter infection)
RN 137056-72-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 22 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:479572 HCAPLUS
DOCUMENT NUMBER: 129:100060
TITLE: Biodegradable targetable microparticle delivery system
INVENTOR(S): Sokoll, Kenneth K.; Chong, Pele; Klein, Michel H.
PATENT ASSIGNEE(S): Connaught Laboratories Ltd., Can.
SOURCE: PCT Int. Appl., 148 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9828357	A1	19980702	WO 1997-CA980	19971219
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 6042820	A	20000328	US 1996-770850	19961220
AU 9854721	A1	19980717	AU 1998-54721	19971219
AU 729305	B2	20010201		
EP 946624	A1	19991006	EP 1997-951024	19971219
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2000509428	T2	20000725	JP 1998-528169	19971219
JP 3242118	B2	20011225		
BR 9714065	A	20001024	BR 1997-14065	19971219
JP 2002138139	A2	20020514	JP 2001-255329	19971219
US 6228423	B1	20010508	US 2000-501373	20000211
US 6287604	B1	20010911	US 2000-502674	20000211
US 6312732	B1	20011106	US 2000-499533	20000211
US 6471996	B1	20021029	US 2000-499532	20000211

PRIORITY APPLN. INFO.: US 1996-770850 A2 19961220
JP 1998-528169 A3 19971219

WO 1997-CA980 W 19971219

AB Copolymers designed for use as particulate carriers contg. functionalizable amino acid subunits for coupling with targeting ligands are described. The copolymers are polyesters composed of .alpha.-hydroxy acid subunits such as D,L-lactide and pseudo-.alpha.-amino acid subunits which may be derived from serine or terpolymers of D,L-lactide and glycolide and pseudo-.alpha.-amino acid subunits which may be derived from serine. Stable **vaccine** prepns. useful as delayed release formulations contg. antigen or antigens and **adjuvants** encapsulated within or phys. mixed with polymeric microparticles are described. The particulate carriers are useful for delivering agents to the immune system of a subject by **mucosal** or parenteral routes to produce immune responses, including antibody and protective responses. A glycolide-lactide-pseudo-Z-serine ester and its deprotected analog were prepd. and microparticles were prepd. from these copolymers. The copolymer microparticles were used to encapsulate immune **adjuvants** or proteins.

IC ICM C08G063-685
ICS C08G075-26; A61K009-16

CC 63-6 (Pharmaceuticals)

ST biodegradable microparticle immune agent; polyester microparticle **vaccine**

IT Immunostimulants
(**adjuvants**; biodegradable targetable microparticle delivery system)

IT Drug targeting
Influenza virus
Vaccines
(biodegradable targetable microparticle delivery system)

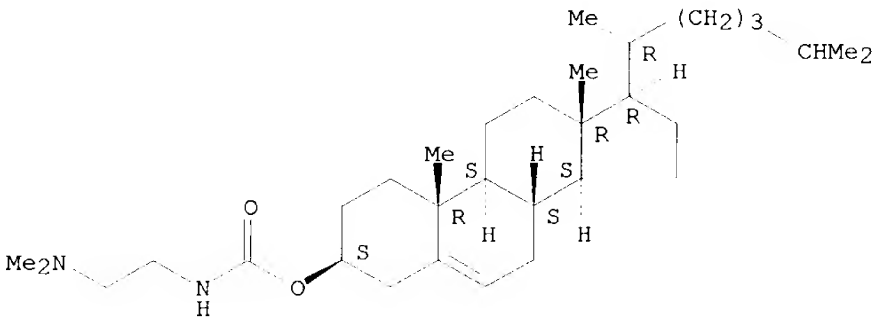
IT **137056-72-5** 209794-26-3 294664-93-0, BAY-R 1005
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(biodegradable targetable microparticle delivery system)

IT **137056-72-5**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(biodegradable targetable microparticle delivery system)

RN 137056-72-5 HCAPLUS

CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 23 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:180751 HCAPLUS
DOCUMENT NUMBER: 128:248559
TITLE: Cationic liposomes with entrapped polynucleotides for use as gene **vaccines**
INVENTOR(S): Gregoriadis, Gregory
PATENT ASSIGNEE(S): School of Pharmacy, UK; Gregoriadis, Gregory
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9810748	A1	19980319	WO 1997-GB2490	19970915
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9742154	A1	19980402	AU 1997-42154	19970915
AU 728581	B2	20010111		
EP 938298	A1	19990901	EP 1997-940250	19970915
EP 928298	B1	20021204		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
CN 1237102	A	19991201	CN 1997-199674	19970915
JP 2001502299	T2	20010220	JP 1998-513398	19970915
EP 1254657	A2	20021106	EP 2002-16936	19970915
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
AT 228824	E	20021215	AT 1997-940250	19970915
KR 2000036088	A	20000626	KR 1999-702103	19990312

PRIORITY APPLN. INFO.:
GB 1996-19172 A 19960913
GB 1996-25917 A 19961213
GB 1997-13994 A 19970701
EP 1997-940250 A3 19970915
WO 1997-GB2490 W 19970915

OTHER SOURCE(S): MARPAT 128:248559

AB Cationic liposomes with entrapped polynucleotide in the intravesicular space are described. The liposomes include cationic components such as cationic lipids such as DOTAP. Preferably the method of forming liposomes uses the dehydration-rehydration method in the presence of the polynucleotide. The polynucleotide preferably operatively encodes an antigen capable of eliciting a desired immune response, i.e., is a gene **vaccine**.

IC ICM A61K009-127
ICS A61K039-00; A61K048-00; C12P025-00; C12N015-00

CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 15

ST gene **vaccine** cationic liposome entrapped polynucleotide

IT Antitumor agents
Dehydration

Extrusion, nonbiological
Freeze drying
Plasmids
Vaccines
(cationic liposomes with entrapped polynucleotides for use as gene **vaccines**)

IT Glycerides, biological studies
Phosphatidylethanolamines, biological studies
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(cationic liposomes with entrapped polynucleotides for use as gene **vaccines**)

IT Antigens
DNA
Gene
Polynucleotides
Promoter (genetic element)
mRNA
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(cationic liposomes with entrapped polynucleotides for use as gene **vaccines**)

IT Drug delivery systems
(injections; cationic liposomes with entrapped polynucleotides for use as gene **vaccines**)

IT Drug delivery systems
(liposomes; cationic liposomes with entrapped polynucleotides for use as gene **vaccines**)

IT Fluidization
(microfluidization; cationic liposomes with entrapped polynucleotides for use as gene **vaccines**)

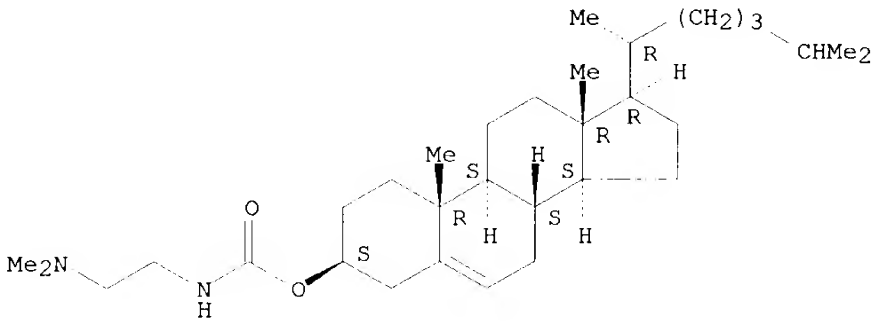
IT Genetic element
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(ribosome-binding site; cationic liposomes with entrapped polynucleotides for use as gene **vaccines**)

IT 124-30-1, Stearylamine 104162-48-3, Dotma **137056-72-5**
144189-73-1, Dotap 158571-62-1, Lipofectamine 205056-57-1
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(cationic liposomes with entrapped polynucleotides for use as gene **vaccines**)

IT **137056-72-5**
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(cationic liposomes with entrapped polynucleotides for use as gene **vaccines**)

RN 137056-72-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

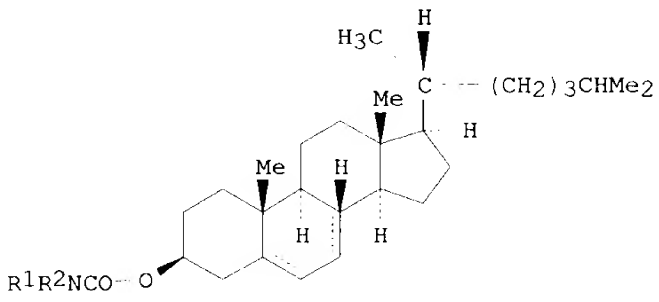


L27 ANSWER 24 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:812174 HCAPLUS
DOCUMENT NUMBER: 128:93230
TITLE: Compositions comprising cationic amphiphiles and co-lipids for intracellular delivery of therapeutic molecules
INVENTOR(S): Fasbender, Allen J.; Welsh, Michael J.; Siegel, Craig S.; Lee, Edward R.; Chang, Chau-Dung; Marshall, John; Cheng, Seng H.; Harris, David J.; Eastman, Simon J.; Hubbard, Shirley C.; Lane, Mathieu B.; Rowe, Eric A.; Scheule, Ronald K.; Yew, Nelson S.
PATENT ASSIGNEE(S): Genzyme Corporation, USA; University of Iowa Research Foundation
SOURCE: PCT Int. Appl., 108 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9746223	A1	19971211	WO 1997-US9142	19970530
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5935936	A	19990810	US 1996-657238	19960603
CA 2228444	AA	19971211	CA 1997-2228444	19970530
EP 845981	A1	19980610	EP 1997-929716	19970530
EP 845981	B1	20020925		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 11511757	T2	19991012	JP 1997-500678	19970530
AT 224705	E	20021015	AT 1997-929716	19970530

PRIORITY APPLN. INFO.: US 1996-657238 A 19960603
WO 1997-US9142 W 19970530

OTHER SOURCE(S): MARPAT 128:93230
GI



I

AB Compns. comprising a steroidal polyamine [e.g. I; R1 = H2N(CH2)yNH(CH2)x; R2 = H2N(CH2)y'NH(CH2)x'; x, x', y, y' .gtoreq.2; H2N(CH2)y' may be replaced by H; bonds at C-5 and C-7 in steroid ring are single or double] or other cationic amphiphile and a phosphatidylethanolamine contg. 2 C16-18 unsatd. fatty acyl residues as co-lipid facilitate entry of DNA, hormones, antibiotics, and other therapeutically active mols. into cells and are useful in gene therapy. Particular addnl. (lyso)phosphatidylethanolamines (helper co-lipids) can contribute to the effectiveness of the primary co-lipid, even if the combination of cationic amphiphile and helper co-lipid alone is relatively ineffective. Excipients such as sugars may also be present to stabilize the amphiphile-DNA complex against oxidn., hydrolysis, irreversible aggregation, and interaction with container surfaces. Thus, a 1:1 mixt. of spermidine cholesterol carbamate [I; x = 4, x' = 3, H2N(CH2)y and H2N(CH2)y' replaced by H, single bond at C-7 of steroid] (II) and dioleoylphosphatidylethanolamine facilitated transfection of Cl-transport-deficient CFT-1 human cystic fibrosis bronchial epithelial cells with plasmids contg. DNA encoding either .beta.-galactosidase or the Cl-channel protein (CFTR protein) in which the cells are deficient. II was prepd. by condensation of cholesteryl chloroformate with N1,N8-dicarbobenzoxyspermidine and deprotection by hydrogenolysis over Pd/C.

IC ICM A61K009-127
ICS C12N015-88

CC 63-6 (Pharmaceuticals)

IT **Vaccinia** virus
(transfection with; compns. comprising cationic amphiphiles and co-lipids for intracellular delivery of therapeutic mols.)

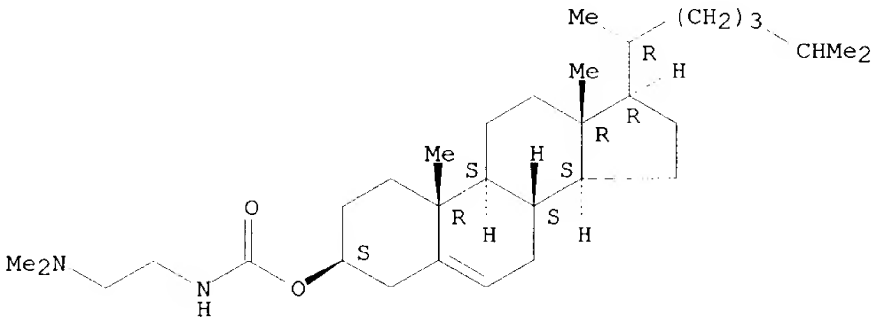
IT 4009-43-2 16777-83-6, Dielaidoylphosphatidylethanolamine 26662-94-2 26662-95-3 34813-40-6 53862-35-4 55252-82-9, Dilinoleoylphosphatidylethanolamine 61599-23-3 69747-55-3 85046-18-0 89576-29-4 **137056-72-5** 201036-16-0
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. comprising cationic amphiphiles and co-lipids for intracellular delivery of therapeutic mols.)

IT **137056-72-5**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. comprising cationic amphiphiles and co-lipids for intracellular delivery of therapeutic mols.)

RN 137056-72-5 HCAPLUS

CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L27 ANSWER 25 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:326850 HCAPLUS
DOCUMENT NUMBER: 126:308806
TITLE: Emulsion and micellar formulations for the delivery of biologically active substances to cells
INVENTOR(S): Liu, Dexi; Liu, Feng; Yang, Jing-Ping; Huang, Leaf
PATENT ASSIGNEE(S): University of Pittsburgh, USA
SOURCE: PCT Int. Appl., 53 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9711682	A2	19970403	WO 1996-US15388	19960926
WO 9711682	A3	19970710		
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
US 6120794	A	20000919	US 1995-534180	19950926
CA 2230940	AA	19970403	CA 1996-2230940	19960926
AU 9672458	A1	19970417	AU 1996-72458	19960926
AU 721245	B2	20000629		
EP 852490	A2	19980715	EP 1996-933899	19960926
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 11512712	T2	19991102	JP 1996-513608	19960926
US 2002090377	A1	20020711	US 2002-38417	20020102

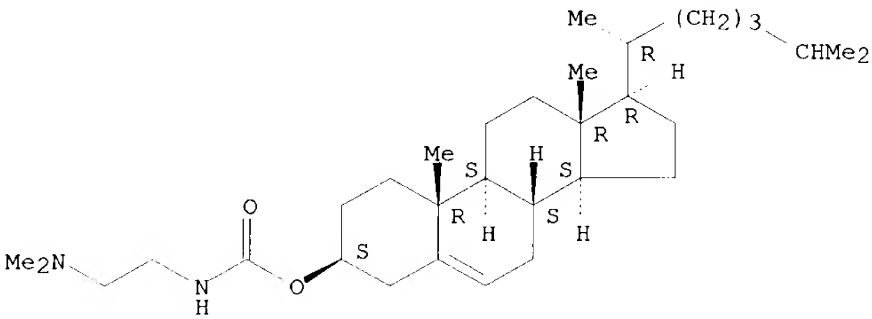
PRIORITY APPLN. INFO.: US 1995-534180 A 19950926
WO 1996-US15388 W 19960926
US 2000-595385 B1 20000615

AB New emulsion and micelle formulations are described as are complexes of these formulations with biol. active substances. The novel formulations are different from cationic lipid vectors such as cationic liposomes in

that the complexes formed between biol. active substances and the emulsion and micellar formulations of this invention are phys. stable and their transfection activity is resistant to the presence of serum. These novel formulations are disclosed to be useful in areas such as gene therapy or **vaccine** delivery. E.g., an emulsion with transfection ability of DNA-emulsion complexes contg. castor oil, egg phosphatidylcholine, Tween 80 and a cationic cholesterol deriv. was stable.

IC ICM A61K009-107
CC 63-6 (Pharmaceuticals)
IT 2462-63-7, Dioleoylphosphatidylethanolamine 9005-65-6, Tween 80 **137056-72-5**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(emulsion and micellar formulations for the delivery of biol. active substances to cells)
IT **137056-72-5**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(emulsion and micellar formulations for the delivery of biol. active substances to cells)
RN 137056-72-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L27 ANSWER 26 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:716309 HCAPLUS
DOCUMENT NUMBER: 125:339076
TITLE: Use of a cationic amphipathic compound as a transfection agent, **vaccine** additive or drug
INVENTOR(S): Haensler, Jean
PATENT ASSIGNEE(S): Pasteur Merieux Serums Et Vaccins, Fr.
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 9632102	A1	19961017	WO 1996-FR547	19960411
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2732895	A1	19961018	FR 1995-4615	19950411
FR 2732895	B1	19970516		
CA 2192597	AA	19961017	CA 1996-2192597	19960411
AU 9656517	A1	19961030	AU 1996-56517	19960411
AU 704369	B2	19990422		
EP 769942	A1	19970502	EP 1996-913569	19960411
EP 769942	B1	20020911		
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, MC, NL, PT, SE				
JP 10501822	T2	19980217	JP 1996-530772	19960411
AT 223716	E	20020915	AT 1996-913569	19960411
EP 1245249	A2	20021002	EP 2002-14143	19960411
EP 1245249	A3	20021211		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, MC, PT, IE, FI				
US 6124270	A	20000926	US 1997-750503	19970303

PRIORITY APPLN. INFO.: FR 1995-4615 A 19950411
EP 1996-913569 A3 19960411
WO 1996-FR547 W 19960411

OTHER SOURCE(S): MARPAT 125:339076

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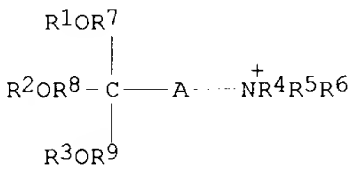
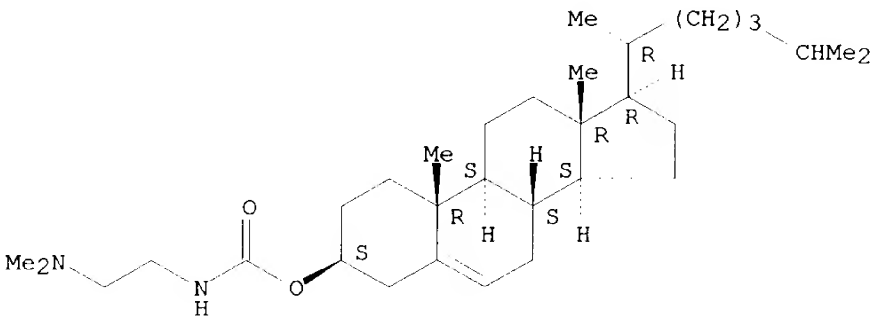


I

AB A cationic amphipathic compd. [I, A = single bond, an NHR', NHCOR' (R'= a straight or branched, optionally substituted, satd. or unsatd. C1-22 aliph. chain optionally interrupted by one or more O, S or N heteroatoms and one or more satd., unsatd. or arom. carbocyclic or heterocyclic radicals); R1, R2 and R3 = higher acyl or alkyl grouping; R7, R8 and R9= (CH2)n alkylene radical (1.ltoreq.n.ltoreq.6); R4, R5, R6 = H, substituted C1-22 alkyl, alkenyl, alkynyl or acyl radical optionally interrupted by one or more heteroatoms selected from O, S and N, or one or more satd., unsatd. or arom. carbocyclic or heterocyclic radicals, or else at least two of the groupings R4, R5 and R6, taken together with the N atom to which they are attached, form a quinolidino, piperidino, pyrrolidino or morpholino grouping, and X is a non-toxic anion] are useful as a drug, a transfection agent or an additive in a **vaccine** compn. Thus, 4 mg of O, O' ,O''-tridodecanoyl-N-(.omega.-trimethylammoniododecanoyl)-tris-(hydroxymethyl)aminomethane (II) was dissolved in 50.mu.L EtOH at 42.degree., this soln. was then quickly injected through a syringe in 1770 .mu.L water followed by refrigeration to obtain a liposomal suspension. To the above liposomal suspension was added 230 .mu.L grippe **vaccine** which contained 220 .mu.g **hemagglutinin** HA/mL and the mixt. thus obtained was divided in 10 doses of 200 .mu.L contg. 5 .mu.g **hemagglutinin** HA and 400 .mu.g II. Strong **adjuvant** activity of the liposomal compn. is shown in immunized

guinea pigs.
IC ICM A61K031-23
CC 63-6 (Pharmaceuticals)
ST cationic amphipathic compd transfection agent **vaccine**; alkyl quaternary ammonium **adjuvant vaccine**
IT Transformation, genetic
Vaccines
(use of cationic amphipathic compd. as transfection agent, **vaccine** additive or drug)
IT Deoxyribonucleic acids
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(use of cationic amphipathic compd. as transfection agent, **vaccine** additive or drug)
IT Immunostimulants
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**adjuvants**, use of cationic amphipathic compd. as transfection agent, **vaccine** additive or drug)
IT Pharmaceutical dosage forms
(liposomes, use of cationic amphipathic compd. as transfection agent, **vaccine** additive or drug)
IT 2462-63-7 88932-06-3 88932-07-4 88932-08-5 88932-09-6 88932-10-9 **137056-72-5** 183615-21-6
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(use of cationic amphipathic compd. as transfection agent, **vaccine** additive or drug)
IT **137056-72-5**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(use of cationic amphipathic compd. as transfection agent, **vaccine** additive or drug)
RN 137056-72-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L27 ANSWER 27 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:437984 HCAPLUS
DOCUMENT NUMBER: 125:96041
TITLE: **Adjuvant** for **vaccines** comprising a sterol-derived lipophilic group bound to a cationic group
INVENTOR(S): Haensler, Jean; Trannoy, Emmanuelle; Ronco, Jorge

PATENT ASSIGNEE(S): Pasteur Merieux Serums et Vaccins, Fr.
SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9614831	A1	19960523	WO 1995-FR1495	19951114
W: AL, AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG, KP, KR, KZ, LK, LR, LS, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TT, UA, US, UZ, VN				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
FR 2726764	A1	19960515	FR 1994-13606	19941114
FR 2726764	B1	19970131		
CA 2205022	AA	19960523	CA 1995-2205022	19951114
AU 9641802	A1	19960606	AU 1996-41802	19951114
AU 706131	B2	19990610		
EP 793484	A1	19970910	EP 1995-940309	19951114
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
CN 1168629	A	19971224	CN 1995-196601	19951114
CN 1096851	B	20021225		
JP 11500409	T2	19990112	JP 1995-515800	19951114

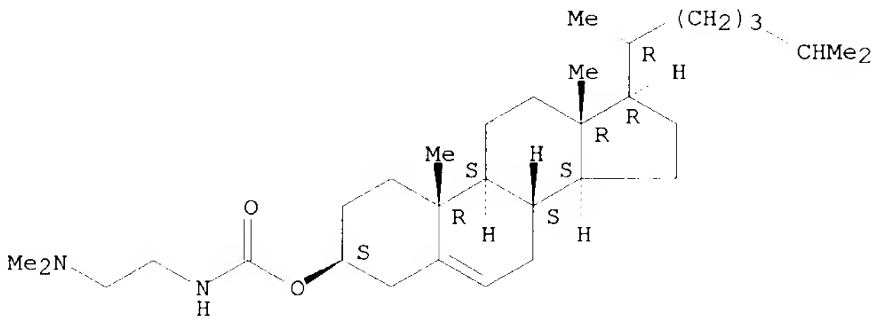
PRIORITY APPLN. INFO.: FR 1994-13606 A 19941114
WO 1995-FR1495 W 19951114

AB An amphipathic compd. including a sterol-derived lipophilic grouping bound to a cationic grouping for use as an **adjuvant** in the delivery of a **vaccine** compn. In a particular embodiment, the lipophilic grouping is a cholesterol deriv. and the cations grouping is a quaternary ammonium or a protonable amine. A **vaccine** compn. including one or more antigens with at least one amphipathic compd. having a sterol-derived lipophilic grouping bound to a cationic grouping, is also disclosed. A soln. of 2.25 g cholesteryl chloroformate in 5 mL chloroform was stirred with a soln. of 2 mL N,N-dimethylethylenediamine in 3 mL chloroform at 0.degree. followed by evapn. of the solvent and the purifn. of 3.beta.-[N-(N'N'-dimthylaminoethane)-carbamoyl]-cholesterol (I) by recrystn. Thus, 300 mg I was dissolved in 100 .mu.L ethanol and 75 .mu.L of this soln was injected to 3 mL of water at 45.degree. and stirred for 5 min. The micellar suspension thus obtained was mixed with 200 .mu.L of a monovalent **influenza vaccine** and divided in 0.3 mL doses. The immunol. response of guinea pigs to the above **vaccine** was studied.

IC ICM A61K009-127
ICS A61K047-28; A61K039-39
CC 63-3 (Pharmaceuticals)
ST **vaccine adjuvant** sterol quaternary ammonium deriv; cholesterol carbamoyl deriv **adjuvant influenza vaccine**
IT Lipids, biological studies
Vaccines
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**adjuvant** for **vaccines** comprising sterol-derived lipophilic group bound to cationic group)

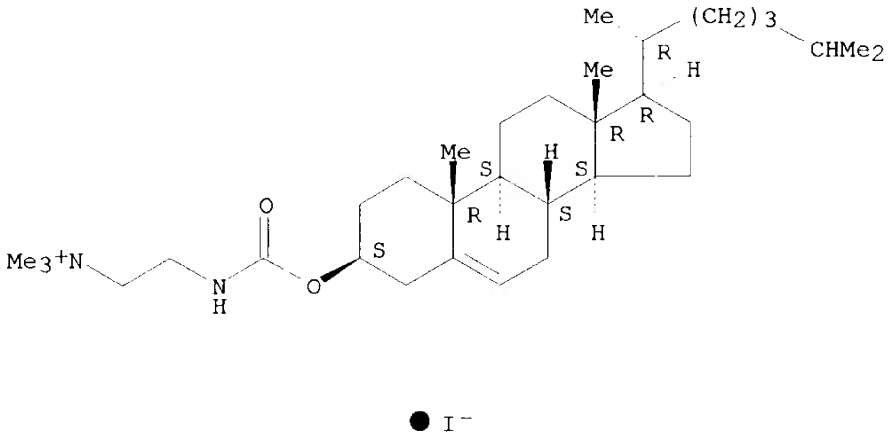
IT Quaternary ammonium compounds, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(conjugates with sterols; **adjuvant** for **vaccines** comprising sterol-derived lipophilic group bound to cationic group)
IT Virus, animal
(**influenza, adjuvant** for **vaccines** comprising sterol-derived lipophilic group bound to cationic group)
IT Pharmaceutical dosage forms
(liposomes, **adjuvant** for **vaccines** comprising sterol-derived lipophilic group bound to cationic group)
IT 108-00-9, N,N-Dimethylethylenediamine 7144-08-3, Cholesteryl chloroformate
RL: RCT (Reactant); RACT (Reactant or reagent)
(**adjuvant** for **vaccines** comprising sterol-derived lipophilic group bound to cationic group)
IT **137056-72-5P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**adjuvant** for **vaccines** comprising sterol-derived lipophilic group bound to cationic group)
IT 2462-63-7 10015-85-7, Dioleoyl phosphatidylcholine 123628-75-1 144108-36-1 **154440-71-8 178823-15-9**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**adjuvant** for **vaccines** comprising sterol-derived lipophilic group bound to cationic group)
IT **137056-72-5P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**adjuvant** for **vaccines** comprising sterol-derived lipophilic group bound to cationic group)
RN 137056-72-5 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



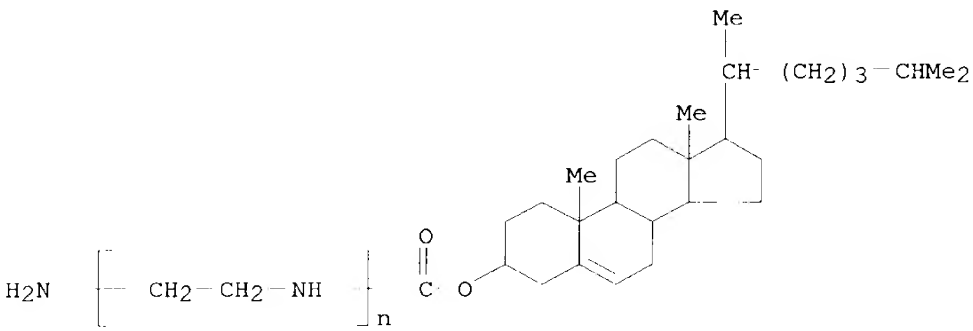
IT **154440-71-8 178823-15-9**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**adjuvant** for **vaccines** comprising sterol-derived lipophilic group bound to cationic group)
RN 154440-71-8 HCAPLUS
CN Cholest-5-en-3-ol (3.beta.)-, ester with 2-(carboxyamino)-N,N,N-trimethylethanaminium iodide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● I^-

RN 178823-15-9 HCAPLUS
CN Poly[imino(1,2-ethanediyl)], .alpha.-[[[(3.beta.)-cholest-5-en-3-yl]oxy]carbonyl]-.omega.-amino- (9CI) (CA INDEX NAME)



L27 ANSWER 28 OF 28 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:260263 HCAPLUS
DOCUMENT NUMBER: 122:29689
TITLE: Induction of alloreactive cytotoxic T lymphocytes by intra-splenic immunization with allogeneic class I major histocompatibility complex DNA and DC-chol cationic liposomes
AUTHOR(S): Hui, Kam M.; Sabapathy, Tr. Kanaga; Oei, Audrey A.; Singhal, Arun; Huang, Leaf
CORPORATE SOURCE: Institute of Molecular and Cell Biology, National University of Singapore, Singapore, 0511, Singapore
SOURCE: Journal of Liposome Research (1994), 4(3), 1075-90
CODEN: JLREE7; ISSN: 0898-2104
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A simple strategy for designing a cancer immunotherapeutic system involves

modification of tumor cells from tumor-bearing animals in vivo in such a way that the host can evoke a specific immune response against them. We have expressed allogeneic class I major histocompatibility complex (MHC) mols. on tumor cells, through ex vivo DNA-mediated gene transfer. These mols. are potent immuno-modulators for the stimulation of strong immune reactions against certain malignancies. In order to achieve efficient gene delivery to tumor cells in vivo, we have compared the efficiencies of gene transfer into **mammalian** tumor cells by the biolistic particle delivery system and cationic liposomes. In this report, we have demonstrated that cationic liposomes prepd. by DC-chol and DOPE gives the best efficiency of transfection for tumor cells in vivo. We also showed that a strong anti-H-2Kb allo-reactive cytotoxic T lymphocyte (CTL) response could be generated following in vivo immunization of AKR/J mouse spleens with the H-2Kb gene and DC-chol cationic liposomes. The direct immunization of mouse spleens to induce cell-mediated immunity against exogenous antigens may allow alternative treatment strategies for cancer immunotherapy.

CC 15-8 (Immunochemistry)
Section cross-reference(s): 63

ST cytotoxic T lymphocyte tumor H2Kb antigen; liposome H2Kb antigen tumor **vaccine**

IT Liposome
(cationic; cytotoxic T lymphocyte response to tumor cells by **vaccination** with H-2Kb DNA and DC-chol cationic liposomes)

IT Neoplasm
Vaccines
(cytotoxic T lymphocyte response to tumor cells by **vaccination** with H-2Kb DNA and DC-chol cationic liposomes)

IT Gene, animal
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(for H-2Kb antigen; cytotoxic T lymphocyte response to tumor cells by **vaccination** with H-2Kb DNA and DC-chol cationic liposomes)

IT Histocompatibility antigens
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(H-2Kb, gene for; cytotoxic T lymphocyte response to tumor cells by **vaccination** with H-2Kb DNA and DC-chol cationic liposomes)

IT Lymphocyte
(T-cell, cytotoxic, cytotoxic T lymphocyte response to tumor cells by **vaccination** with H-2Kb DNA and DC-chol cationic liposomes)

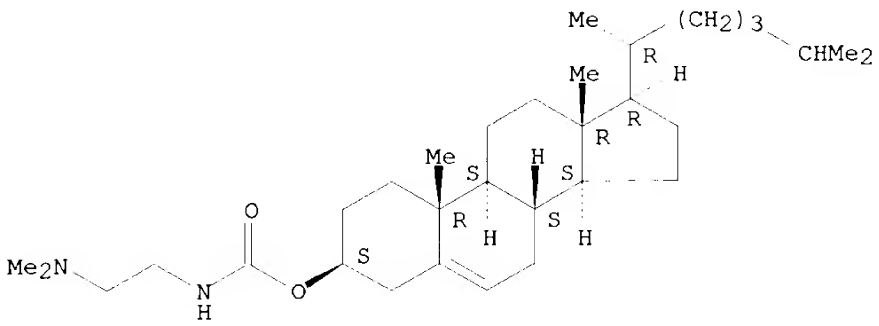
IT **137056-72-5**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cytotoxic T lymphocyte response to tumor cells by **vaccination** with H-2Kb DNA and DC-chol cationic liposomes)

IT **137056-72-5**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cytotoxic T lymphocyte response to tumor cells by **vaccination** with H-2Kb DNA and DC-chol cationic liposomes)

RN 137056-72-5 HCAPLUS

CN Cholest-5-en-3-ol (3.beta.)-, [2-(dimethylamino)ethyl]carbamate (9CI) (CA INDEX NAME)

Absolute stereochemistry.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